

By Mary Ann Richardson

If your users have recently made the jump to Excel 2007 -- or an upgrade is just around the corner -- you could be in for a lot of hand-holding. This collection of tips from our Office Suite newsletter will help them acclimate to the new functionality and unfamiliar interface by explaining how to perform their everyday tasks using Excel 2007's tools and techniques.

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Use watermarks to indicate confidential worksheets in Excel 2007

Excel 2007 has no explicit command that you can use to create a watermark. However, there is a way to simulate a watermark using some of the commands on the Header & Footer Design Ribbon. For example, say you would like to mark all pages of a printed worksheet *Confidential*. Follow these steps:

1. Click anywhere in the worksheet.
2. Click the Insert tab and then click Header & Footer in the Text group.
3. Under Header, click in the Center section on the Design tab of the Header & Footer Tools in the Header & Footer group.
4. Click Picture, then navigate to the file containing the picture and click Insert as we've done in **Figure A**. (This example inserts a PNG file created from a WordArt object in a Word 2007 document.)
5. Click Format Picture in the Header & Footer group.
6. Click the Picture tab, select Washout from the Color drop-down list (**Figure B**), and click OK.



Figure A

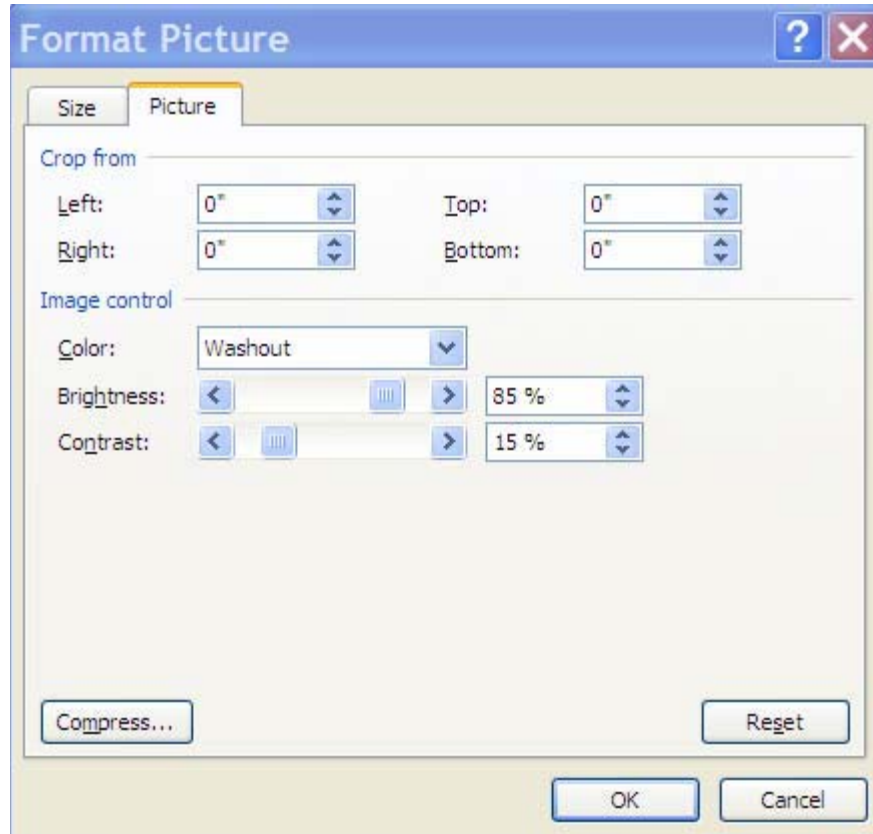


Figure B

Excel will include the watermark on all printed pages of the worksheet (**Figure C**).

Figure C



Save effort by defining names for Excel 2007 formulas

As in earlier releases, Excel 2007 lets you reference a formula by name. For example, say you use the worksheet shown in **Figure A** to calculate the average monthly sales for each of your products by Region. You would like your users to be able to calculate the Average Monthly Sales for each product anytime of the year, without having to create their own formulas.

Figure A

	A	B	C	D	E	F	G	H	I	J	K
1	Average Product Sales for FY 2008										
2											
3	Product	Product A1	Product A2	Product A3	Product A4	Product A5	Product A6	Product A7	Product A8	Product A9	Product A10
4	Jan	356	160	335	158	557	555	117	801	416	219
5	Feb	861	437	823	475	569	627	648	263	222	330
6	Mar	883	523	921	258	531	833	783	867	997	935
7	Apr	715	513	758	142	138	802	132	652	776	710
8	May	818	202	907	715	873	559	872	426	421	237
9	Jun	323	291	259	476	595	820	670	454	626	245
10	Jul	250	247	572	119	204	636	371	633	383	621
11	Aug										
12	Sep										
13	Oct										
14	Nov										
15	Dec										

To set this up, follow these steps:

1. Click in cell B2.
2. On the Formula tab, click Define Name in the Define Name Group.
3. Click Define Name.
4. Click in the Name box and type *AverageMonthlySales* (**Figure B**).
5. Click in the Refers To box and enter `=AVERAGE(B4:B15)`.
6. Click OK.

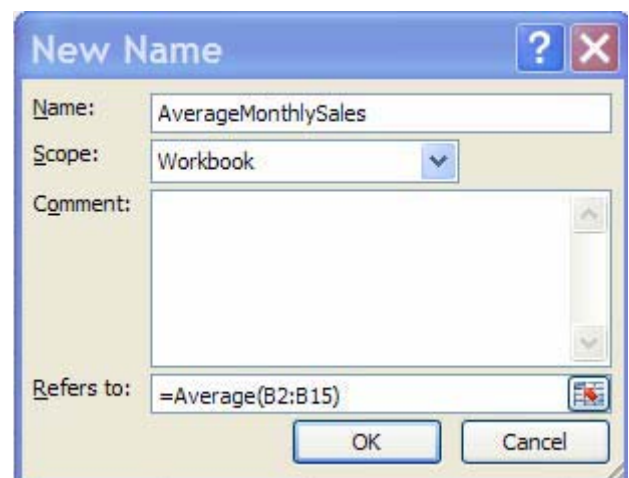


Figure B

10 tips for boosting your Excel 2007 productivity

To enter the named formula in row 2 of the worksheet, follow these steps:

1. Select cells B2:K2.
2. Click the Formula tab and then click Use In Formula in the Define Name Group (**Figure C**).
3. Click AverageMonthlySales.
4. Press Ctrl + Enter (**Figure D**).

Figure C

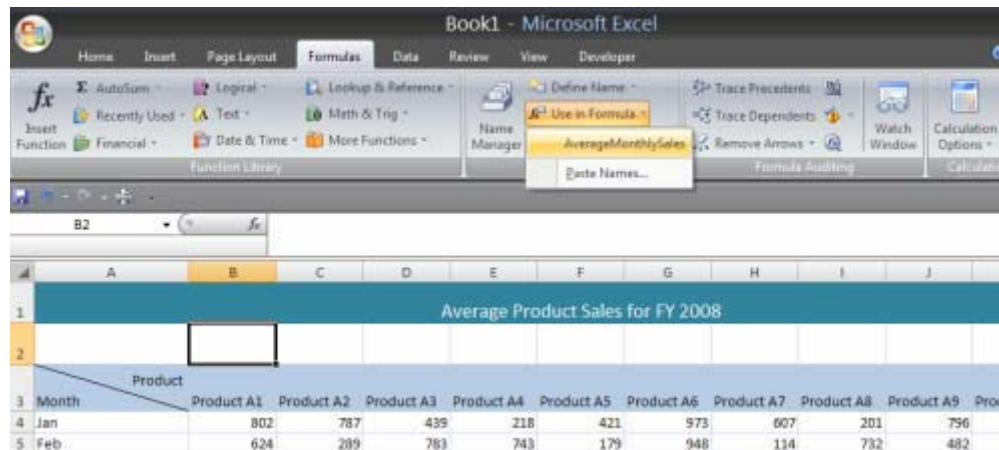


Figure D

The screenshot shows the formula bar at the top with '=AverageMonthlySales' entered. The worksheet below shows the same table as in Figure C, but with the formula applied to the selected cells. The data for January and February is visible, and the formula has been applied to the selected cells.

Month	Product A1	Product A2	Product A3	Product A4	Product A5	Product A6	Product A7	Product A8	Product A9	Product A10
Jan	802	787	439	218	421	973	607	201	796	557
Feb	624	289	763	743	179	948	114	732	482	

You can define and add other operations to the Use In Formula menu (such as Sum, MIN, or Max) that allow users to analyze their worksheets without having to write their own formulas.

Use the new Excel 2007 WordArt feature for your Word documents

Office 2007 includes an enhanced version of WordArt. However, it is available only in Excel 2007 and PowerPoint 2007. Word 2007 uses the older version. But this doesn't mean you can't use Word Art objects created in Excel or PowerPoint in your Word 2007 documents. For example, say you want to use the new WordArt to create a company logo for your Word document header.

Follow these steps:

1. Open a blank workbook in Excel 2007.
2. Click on any cell.
3. Click the Insert tab.
4. In the Text group, click WordArt.
5. Click Fill-Accent 2, Warm Matte Bevel. (It's in the middle of the fifth row.)
6. Type *XMZ Technology*.

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- Click the Format tab under Design Tools.
- In the Shape Styles group, scroll to and click Moderate Effect, Dark 1.



- Right-click the logo and select Copy.
- Click where you want the logo to appear in your Word document.
- On the Home tab, click the Paste button down arrow and then select Paste Special. Select Microsoft Graphic Office Object, if necessary.
- Click OK. The logo will appear in your document.

If you later want to make changes to the logo, you will need to go back and edit it in Excel 2007.

Use Excel 2007's Top/Bottom rules for quick data analysis

You can use Excel 2007's data visualization feature to keep tabs on when the data in a worksheet attain a certain value. For example, to discover which regions have achieved above-average sales this quarter, follow these steps:

- Select the cells you want to analyze.
- Click the Home tab.
- In the Styles group, click Conditional Formatting, then select Top/Bottom Rules.
- Click Above Average, then click OK.
- Now all cells with above-average sales values will appear marked in red. To find out who the top 10% of your performers are, follow these steps:
- Select the columns of cells you want to analyze.
- Click the Home tab.
- In the Styles group, click Conditional Formatting and then click Top 10%.
- Click the drop-down arrow in the With box and select Custom Format.
- Click the Fill tab and select Yellow under Background Color.
- Click OK twice.

Now all values in the upper 10% of the range appear highlighted in yellow. You can set an entire spreadsheet with conditional formatting rules and watch the results change each time you enter new data.

Create a custom header for your Excel 2007 worksheets

Adding headers to Excel 2007 worksheets differs significantly from earlier releases. Instead of working with a separate Page Setup dialog, Excel 2007 lets you work with the header directly on the worksheet in Page Layout view. For example, to create a header with the title, "2007 Profit & Loss Statement" in the center, the company's logo inserted at the left margin, and the date inserted at the right margin, follow these steps:

1. Click the View tab and then click Page Layout in the Workbook Views group.
2. Click the words *Click to Add Header* above row 1.
3. Type *2007 Profit && Loss Statement*. (Note that you must enter the ampersand twice in order to enter it as a character.)
4. Click outside the box to the left of the title.
5. In Header & Footer Design Ribbon, click Picture in the Header & Footer Elements group.
6. Browse to the file containing your company's logo, and then click Insert.
7. Click any cell in the worksheet.
8. Click on the logo.
9. In Header & Footer Tools Design Ribbon, select Format Picture in the Header & Footer Elements group.
10. Click the Down arrow of the Height box until it reaches 50%, then click OK.
11. Click to the right of the worksheet title near the right margin.
12. Click Current Date in the Header & Footer Elements group of the Header & Footer Tools Design tab.
13. Click in any cell to exit the Header/Footer mode.

You can perform similar operations to create a footer for your worksheet. To access the footer area of your worksheet, click anywhere in the header, then click Go To Footer in the Navigation group of the Header & Footer Tools tab.

Let Excel 2007's new Remove Duplicates feature find unique values in your data

It's the end of the month and you need to write a quick memo to report on last month's sales. You have a worksheet listing 100 invoices for the month, including the Invoice Number in Column A, the Customer Name in Column B, and the Product Name in Column C. Because most of your customers place orders several times a month, you need a quick way to generate a listing of each customer that ordered from you last month.

Before Excel 2007, you would obtain this data using either Excel's Advanced Filter or Pivot Table feature. With Excel 2007's new Remove Duplicates feature, you have an additional, even quicker, way to produce this list. Follow these steps:

1. Select the Customer Name column.
2. Copy the data to a blank section of the worksheet. (You should leave at least one blank column between the original data and the copied data.)
3. Click inside any cell within the copied cells.
4. Click the Data tab.
5. In the Data Tools group, choose Remove Duplicates, then click OK.

Excel removes all duplicate customer names from the copied list. You can also use Remove Duplicates to produce a list of unique values for more than one field. For example, to generate a list of customers and the products they ordered, follow these steps:

1. Select the Customer Name and Product Name columns.
2. Copy the selected data to a blank area of the worksheet.
3. Click inside any cell within the copied cells.
4. Click the Data tab.
5. In the Data Tools group, choose Remove Duplicates, then click OK.

Excel generates a list of each customer and the products ordered, excluding duplicate orders for the same product from the same customer. You can then use the Sort function to make the list easier to read by following these steps:

1. Click any one of the cells in the Remove Duplicates results list.
 2. Click the Data tab.
 3. Click the Sort button.
 4. Click the My Data Has Headers check box.
 5. Click the Sort By drop-down arrow and select Customer Name, then click OK.
-

Eliminate those unfriendly error messages with Excel 2007's IFERROR function

Do your Excel users know what to do when they get an error — or do they just cringe when they see that dreaded #N/A!? For example, say your application lets them enter an employee ID number the Vlookup function uses to look up an employee's name. If no number in the table corresponds to the user's entry, Excel automatically returns #N/A! In response to that error message, the user may often spend quite a bit of time retrying that entry. A better message might be one that explains that the employee number is no active since the employee has left the company.

To replace the cryptic message with a meaningful message, earlier versions of Excel would require you to rewrite the lookup formula as part of an IF statement, such as:

```
=IF(ISNA(VLOOKUP(A2,$AA$1:$AB$99,2,False)), "This employee has left the company.",  
VLOOKUP(A2,$AA$1:$AB$99,2,False))
```

While this statement would certainly make your spreadsheet more user friendly, it is not very efficient, forcing Excel to calculate VLOOKUP twice if the employee number is in the lookup table. To avoid having to recalculate the function twice in an IF statement, Excel 2007 offers an alternative: the IFERROR() function. Using IFERROR, you would replace the above formula with the following:

```
=IFERROR(VLOOKUP(A2,$AA$1:$AB$99,2,False), "This employee has left the company.")
```

In addition to #N/A!, you can use the IFERROR() function to capture #DIV/0!, #NUM!, #NAME?, and #NULL! errors that you anticipate your users might get while working with your worksheet. For example, if a certain calculation frequently yields division by zero errors, the following IFERROR statement would provide a more meaningful message:

```
=IFERROR(D3/D6, "You cannot divide by zero. Change the value in D6 to a nonzero number.")
```

Let Excel's Indirect function keep data at your fingertips

Rather than have your users search through dozens of worksheets for specific data, put the data they need most in its own worksheet in the front of the workbook. For example, say you have the worksheet shown in **Figure A**, which keeps track of replacement costs in your Inventory workbook.

Figure A

	A	B	C	D	E	F
2	Replacement Cost					
3						
4						
5		Purchase Date	Purchase Price	Number Purchased	Cost	
6	Dining Chair	38450	135.21	525	\$ 70,985.25	
7	Dining Table(4)	38121	254.65	45	\$ 11,459.25	
8	Dining Table (6)	38367	378.45	25	\$ 9,461.25	
9	Dining Table (8)	38387	566.78	15	\$ 8,501.70	
10	Serving Table	37302	345.12	6	\$ 2,070.72	
11	Side Board	38497	856.12	8	\$ 6,848.96	
12	Hostess Station	38783	215.64	15	\$ 3,234.60	
13	Wing Chairs	39000	864.78	100	\$ 86,478.00	
14	Occasional Table	39414	159.23	45	\$ 7,165.35	
15	Mirror, Gilt Frame	38815	451.33	25	\$ 11,283.25	
16	Mirror, Wood Frame	38851	251.12	15	\$ 3,766.80	
17						
18	Total Cost				\$ 221,255.13	
19	Most Expensive				\$ 86,478.00	
20	Least Expensive				\$ 2,070.72	

Follow these steps:

1. Click on E8.
2. Select Define Name in the Defined Names group on the Formulas tab.
3. Enter *Total_cost* in the Name text box and then click OK.
4. Click on E9.
5. Select Define Name in the Defined Names group on the Formulas tab.
6. Click on E10.
7. Enter *Most_Expensive* in the Name text box and then click OK.
8. Select Define Name in the Defined Names group on the Formulas tab.
9. Enter *Least_Expensive* in the Name text box (**Figure B**) and click OK.
10. Create a new blank sheet, move it to the front of the workbook, and enter the data shown in **Figure C**.

Figure B

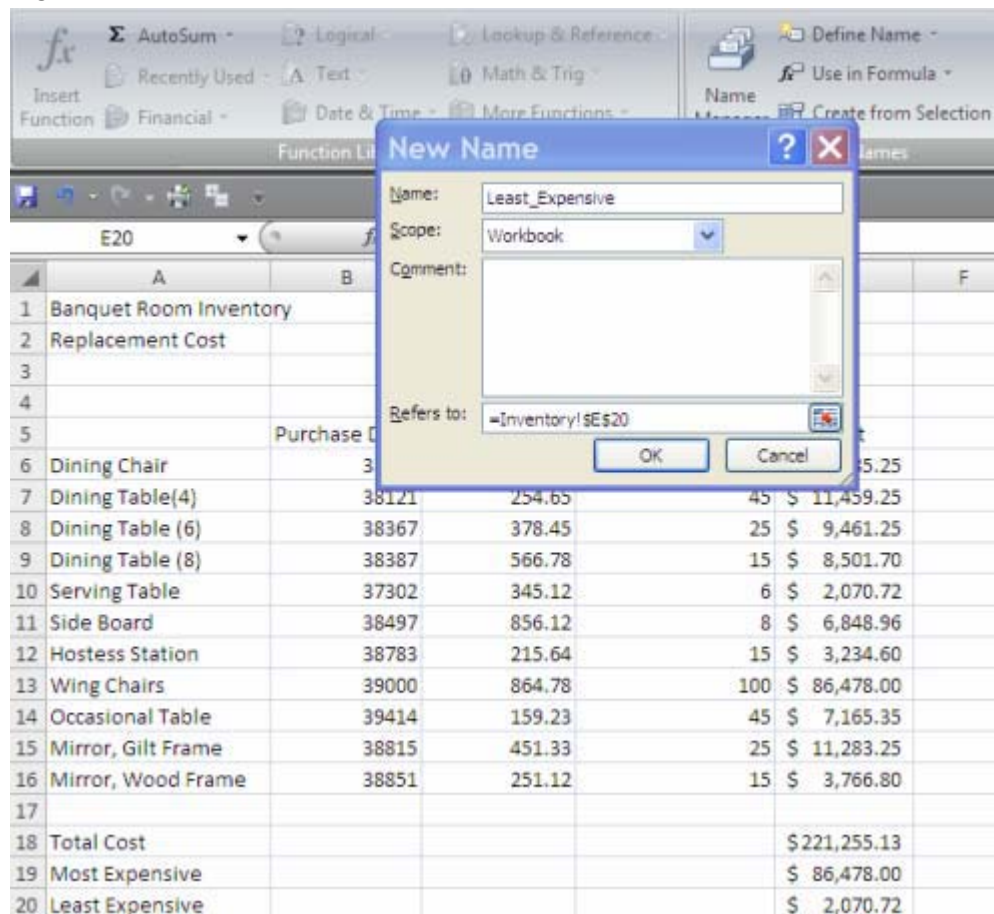


Figure C

C9		
A	B	C
1	Worksheet	Cell Reference
2	Inventory	Total_Cost
3	Inventory	Least_Expensive
4	Inventory	Most_Expensive
5		

Now, when the user opens the workbook, Excel displays the data shown in **Figure D** for replacement costs on the first sheet of the workbook.

Figure D

C9		
A	B	C
1	Worksheet	Cell Reference
2	Inventory	Total_Cost
3	Inventory	Least_Expensive
4	Inventory	Most_Expensive

Use Excel's spinners to analyze input value assumptions

Sensitivity analysis determines how a spreadsheet's outputs will vary in response to changes made to the spreadsheet's inputs. Excel gives us a number of tools for sensitivity analysis. One of these is the spinner. A spinner is linked to a cell containing one of the variable inputs. As the user clicks on the spinner, the value of the linked cell changes.

For example, the following worksheet can be used to examine how changes in three variable inputs (price, unit cost, and fixed cost) affect profit. To set up the formulas for the worksheet, follow these steps:

1. Select C1:D7, as shown in **Figure A**.

Figure A

C	D
Price	2
Demand	47000
Unit cost	0.440
Fixed cost	20000
Revenue	94000
Variable cost	20680
Profit	53320

2. Click the Formulas tab, click Create From Selection in the Defined Names group, and then click OK.
3. Enter 2 in cell D1, which is the current price.
4. Enter the rest of the formulas as shown in **Figure B**.

Figure B

C	D
Price	2
Demand	=65000-9000*Price
Unit cost	=I1/100
Fixed cost	=I2*1000
Revenue	=Price*Demand
Variable cost	=Unit_cost*Demand
Profit	=Revenue-Fixed_cost-Variable_cost

5. Type *Enter Unit Cost (in hundredths)* in cell H1.

6. Type *Enter Fixed Cost (in thousands)* in cell H2.
7. Enter 44 in cell I1 (the current Unit Cost).
8. Enter 20 in cell I2 (the current Fixed Cost), as shown in **Figure C**.

Figure C

H	I
Enter Unit Costs (in hundredths)	44
Fixed Cost (in thousands)	20

9. Click the Developer tab to display the Forms toolbar.
10. Click Insert in the Forms Group and then click the Spin button under Form Controls.
11. Click and drag in cell F1 to create the Price spinner.
12. Repeat step 9 and then click and drag in cell F3 to create the Unit Cost spinner.
13. Repeat step 9 and then click and drag in cell F4 to create the Fixed Cost spinner.
14. Right-click the spinner in F1, click Format Control, and enter the values shown in **Figure D**.

Figure D

The screenshot shows the 'Format Control' dialog box with the 'Control' tab active. The settings are as follows:

- Current value: 2
- Minimum value: 2
- Maximum value: 5
- Incremental change: 1
- Page change: (empty)
- Cell link: \$D\$1
- ☒ 3-D shading

Buttons at the bottom: OK, Cancel.

15. Right-click the spinner in F3, click Format Control, and enter the values shown in **Figure E**.

16. Right-click the spinner in F4, click Format Control, and enter the values shown in **Figure F**.

Figure E



Figure F



Your manager just learned that increases in material costs have raised the unit cost to .60. Using the spinner to adjust for this higher cost, the profit decreases to \$45,800. Clicking the Price spinner up arrow once to raise the price to \$3 immediately shows a drop in demand (assuming the demand formula is correct). However, even with this drop in demand, profit goes up significantly, which may warrant the price increase.

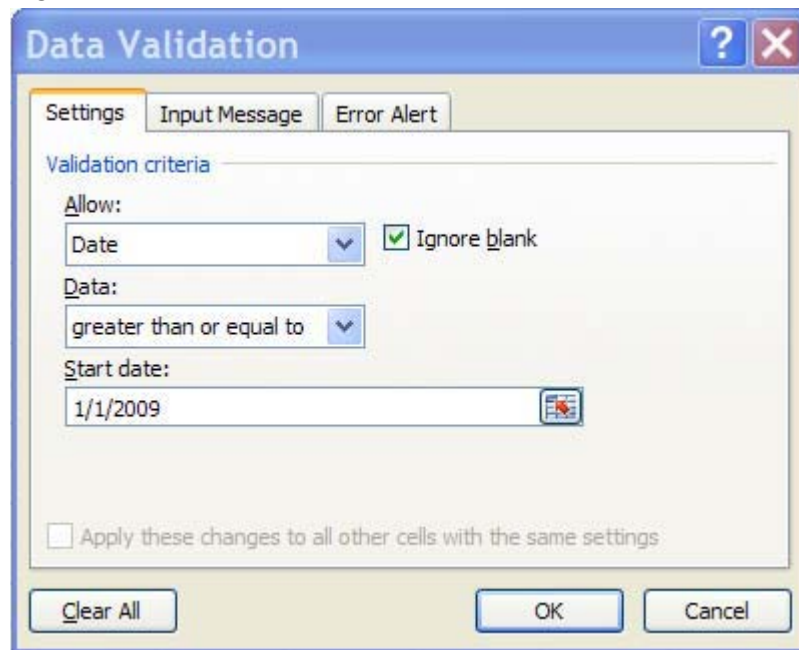
Prevent users from inadvertently entering the wrong year in a worksheet

Old habits die hard. This is especially true when it comes to entering dates in January. Fortunately, Excel provides a way to prevent users from mistakenly entering 1/1/2008 when they should be entering 1/1/2009. Follow these steps when setting up your worksheets for data entry next year:

1. Select the range of cells where users will enter a date.
2. Click the Data tab and then click Data Validation in the Data Tools group.
3. Click on the Settings tab.

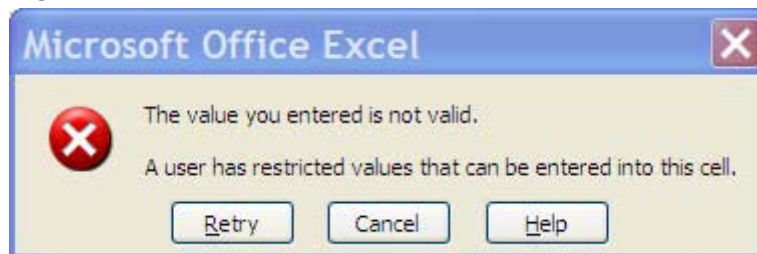
4. Click the drop-down arrow in the Allow box and select Date.
5. Click the drop-down arrow in the Data box and select Greater Than Or Equal To.
6. Under Start date, enter 1/1/2009, as shown in **Figure A**, and click OK.

Figure A



Now, when a user enters 2008 instead of 2009, Excel displays the message shown in **Figure B**.

Figure B



Quickly move data to another workbook without copy and paste

Let's say you keep all records for your clients for the Philadelphia region in one Excel workbook. The first worksheet lists the company name, address, and contact name and title. The second worksheet keeps a record of the clients' sales transactions. You would like to use the information in the Excel workbook to send weekly reminders of weekly promotions to your clients. However, you don't want the marketing staff to work with the same workbook as the sales staff. Using Excel's worksheet copy/move feature, you can quickly create a workbook that contains only the information needed to address your weekly promotional mailings. Follow these steps:

1. Open the workbook containing the customer data.
2. Right-click the first worksheet tab.
3. Select Move Or Copy from the shortcut menu (**Figure A**).

Figure A

	A	B	C
34	GROSELLA-Restaurante	Manuel Pereira	Owner
35	Hanari Carnes	Mario Pontes	Accounting Manager
36	HILARIÓN-Abastos	Carlos Hernández	Sales Representative
37	Hungry Coyote Import Store	Yoshi Latimer	Sales Representative
38	Hungry Owl All-Night Grocers	Patricia McKenna	Sales Associate
39	Island Trading	Helen Bennett	Marketing Manager
40	Königlich Essen	Philip Cramer	Sales Associate
41	La corne d'abondance	Daniel Tonini	Sales Representative
42	La maison d'Asie	Annette Roulet	Sales Manager
43	Laughing Bacchus Wine Cellars	Yoshi Tannemuri	Marketing Assistant
44	Lazy K Kountry Store	John Steel	Marketing Manager
45	Lehmanns Markt	Donna Messner	Sales Representative
46	Let's Stop N Shop	Joe Yorres	Owner
47	LILA-Supermerc	Carlos González	Accounting Manager
48	LINO-Delicatese	Pepe Izquierdo	Owner
49	Lonesome Pine	John Wilson	Sales Manager
50	Magazzini Alimentari	Vanni Rovelli	Marketing Manager
51	Maison Dewey	Therese Dewey	Sales Agent
52	Mère Paillarde	John Fresnière	Marketing Assistant
53	Morgenstern Gesundkost	Alexander Feuer	Marketing Assistant
54	North/South	John Crowther	Sales Associate
55	Océano Atlántico	John Moncada	Sales Agent
56	Old World Delicatessen	John Phillips	Sales Representative
57	Ottelier Käseladen	Christine Pfalzheim	Owner
58	Paris spécialités	John Bertrand	Owner
59	Pericles Comidas Especiales	Guillermo Fernández	Sales Representative
60	Piccolo und mehr	John Pipp	Sales Manager

- Click the To Book drop-down list and select (new book).
- Select the Create A Copy check box (**Figure B**) and click OK.

Figure B

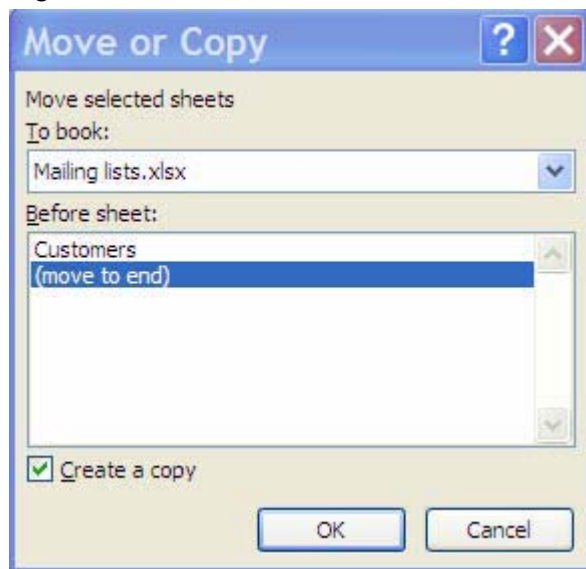


Excel creates a new workbook (Book1) and copies the data from the first worksheet to Sheet 1 of the new book. Save the new workbook as Mailing Lists.

To add another list of clients from another workbook — say, one containing records on customers from Cherry Hill, NJ — follow these steps:

1. Open the Mailing Lists workbook.
2. Open the second workbook containing the customer address listing for Cherry Hill on Sheet 1.
3. Right-click the Sheet 1 tab.
4. Click Move Or Copy from the shortcut menu.
5. Click the To Book drop-down list and select Mailing Lists.
6. From the Before Sheet list box, select (move to end).
7. Select the Create A Copy check box (**Figure C**) and click OK.

Figure C



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Version history

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