Introduction to Microsoft Excel 2010

Handout from Lodi Memorial Library

(Developed by Barb Hauck-Mah for ESL Tech Literacy Grant;

Modified by Jennifer Cohen Feb. 2015)

What is Excel?

It is a Microsoft Office computer software program that organizes and analyzes numbers, data, and labels in spreadsheet form. Excel makes it easy to translate data tables into charts and graphs.

What we will learn in Introduction to Excel

HOW TO:

- Open and save Excel files
- Enter data and move around a spreadsheet
- Use Excel formulas
- Write basic math formulas
- Identify and edit mistakes
- Change the style and format of data
- Print a spreadsheet

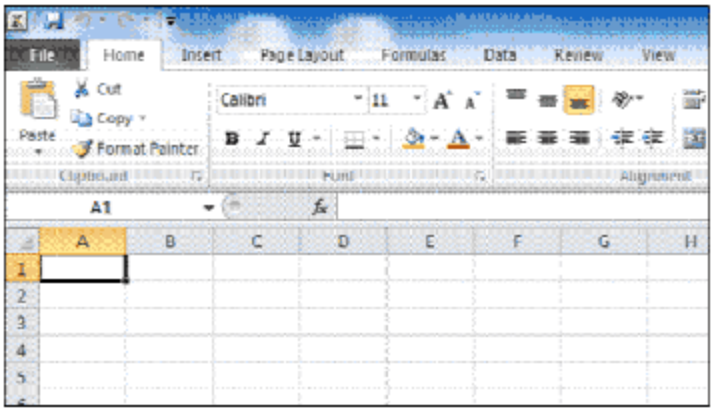
How to open Excel

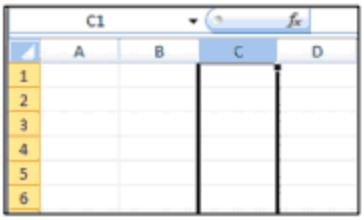
1. Click the Start button in bottom left corner of computer screen
2. Point to **Programs** or **All Programs**.
3. Scroll to find **Microsoft Office** in program list and
4. Click on **Microsoft Excel 2010** to open.

*TIP- Right click Microsoft Excel 2010 on Microsoft Office menu and click on **Pin to Start Menu** or **Create Shortcut**. Now Excel will be in the start menu or on your desktop, respectively. You can just click on it to open (you'll need to double-click it if it's a desktop shortcut; buttons in the start menu only need to be clicked once).*

When you open Excel, a new worksheet opens.

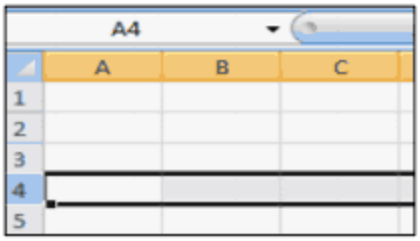
An Excel spreadsheet is a grid with COLUMNS, ROWS, and CELLS. It looks like an accounting spreadsheet.

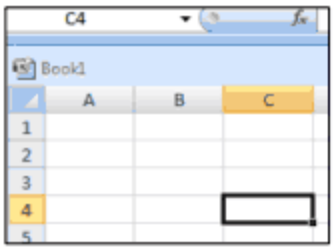




A **column** is one vertical collection of cells from top to bottom in the spreadsheet. In the picture to the left, Column C is highlighted.

A **row** is one horizontal collection of cells from left to right in the spreadsheet. In this picture to the right, Row 4 is highlighted.





A **cell** is one of the black boxes that make up the columns and rows. A CELL NAME is the column letter and the row number. When you click on a cell, you can see the cell name in the cell name box. In this picture to the left, Cell C4 is highlighted.

How to move around the Excel spreadsheet

Using the two scrollbars: They are on the right side and the bottom of the screen. The scrollbars help you to move up and down or left and right really fast.

Moving to a cell: Point at a specific cell with your mouse and click on it using the left button.

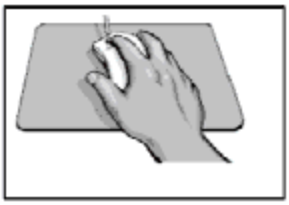
Using the keyboard: Click Up Arrow key to move UP one cell. Click Down Arrow key to move DOWN one cell.

Moving across a row: Click left or right arrow keys to move LEFT or RIGHT one cell at a time. You can also click the Tab key to move to the RIGHT one cell at a time.

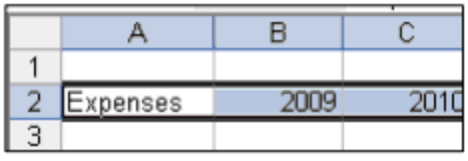
Practice 1 Moving around in Excel

1. Open Excel.
2. Click on Column B.
3. Click on Row 6.
4. Click on Cell C6.
5. Use the Tab key to move to Cell E6.
6. Move from Cell E6 to Cell A8.
7. Scroll down to Row 20.
8. Scroll over to Column P.

Practice 2 How to highlight cells in Excel



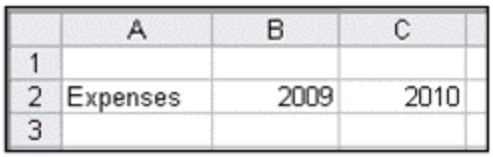
1. Put the cursor to the left or right of the cell(s) you want to highlight.
2. Put your pointer finger on the left mouse button.
3. Press and hold down the left mouse button.
4. Move the mouse across the cell(s) you want to highlight.
5. Lift up your finger.
6. You will see that the first cell you highlighted is white; the rest are a grayish-blue.



	A	B	C
1			
2	Expenses	2009	2010
3			

How do I deselect cells?

If you want to get rid of the highlighting, click on a white part of the screen. This will stop the highlighting; the greyish-blue color will go away.



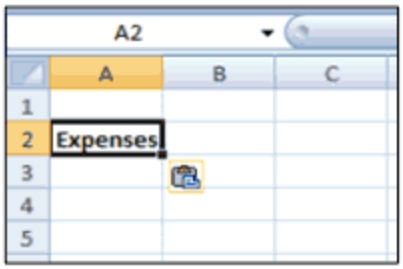
	A	B	C
1			
2	Expenses	2009	2010
3			

How to add data to a spreadsheet

Three types of data can be typed in an Excel cell:

DATA TYPE	EXAMPLES
Words	Names, labels, months, addresses, titles
Numbers	Any number 1,000 .3524 -4.8
Formulas	=B+C2 =c3/c8 = SUM(A1:A10)

How do I put data in a cell?



1. Click on a cell.
2. Type in a word or a number.
3. Press Enter key. This will take you to the next cell below.
4. Type another word or number.
5. If you want to move to a cell to the left or right, press the left or right arrow keys on the keyboard.

Editing and deleting data

How do I change data I typed in a cell?

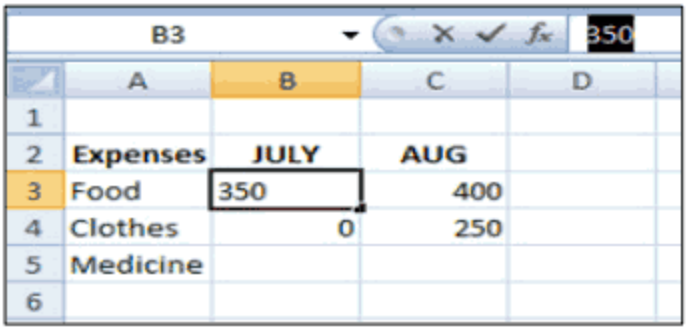
1. Click on the cell that has the data you want to change.
2. Type different data in the same cell.
3. Press the Enter key.

How do I delete data?

1. While in a cell, use the **Backspace** key to delete a character at a time. You can then retype the data the way you want it to be.
2. If you want to delete the contents of an entire cell, click on that cell and then press the Backspace key.
3. If you want to delete the contents of multiple cells, highlight those cells and then press the **Delete** key on your keyboard.

How do I change data that's in a cell?

1. Click in the formula area of the **Formula Bar**.
2. Press backspace to delete what you want and then retype the data.



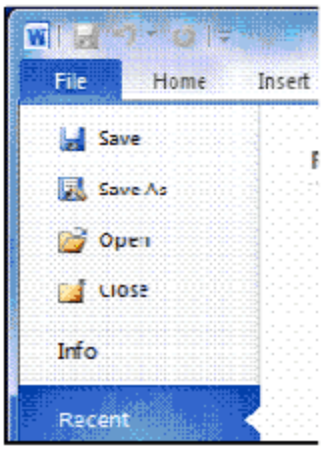
Click here in formula bar

Practice 3 Create an Excel worksheet

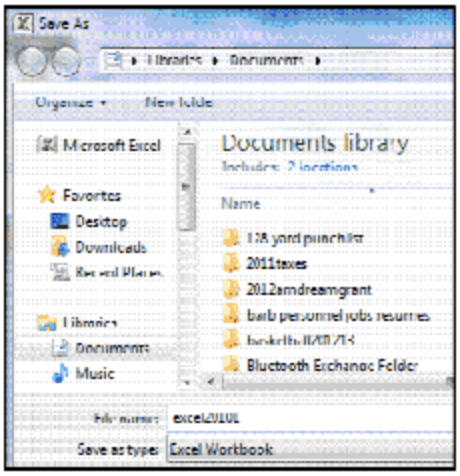
Start in Cell A2. Enter the data in each cell as shown in the table below.

	A	B	C	D	E
1					
2	Expenses	JULY	AUG	SEPT	Q3
3	Food	350	400	450	
4	Clothes	0	250	100	
5	Medicine	50	50	50	
6	Phone	100	125	125	
7	Entertainment	30	60	50	
8	TOTAL				
9					

Practice 4 Save a new Excel file



1. Click the **File** tab in the top left corner of the screen.
2. Choose the **Save as** option from the File menu.
3. A pop-up menu of **My Documents** will open.
4. Click in **File name** box towards bottom of pop-up menu. Highlight the words that are already in the box before deleting them. Then type in what you actually want to call the file.
5. If you know you're going to be opening this file on a computer that has a Microsoft Excel version that came out before 2010 or if you're not sure what version the computers you'll be using to open it has, you'll want to choose Excel 97-2003 Document from the **Save as type** drop down menu, found right below the File name box. This will save the file as a .xls file, which can be opened by computers with Excel software from 1997-2007. Excel 2010 regularly saves documents as a .xlsx file, which can only be opened by computers that have Excel 2010 installed.



6. Click **Save** button. A copy of this file is now saved in your My Documents folder.
7. The name you've given your file can now be seen at the very top of the screen.

How to save a file once it's already been named

1. Click the **File** tab in the top left corner of the screen.
2. Choose the **Save** option from the File menu.

How to exit Excel

Click the X button in the right corner of the screen (it should turn red when you roll your mouse over it).

How to open an existing Excel File

1. Once in Excel, click on the **File** tab and then the **Recent** option on the menu. This will bring up a list of your recent documents. You can then click on one of the files on the list to open it.
2. If you have not used the file you want to open recently, you will have to click on the **Open** option rather than the Recent option on the menu. The My Documents menu will open and you can choose the file you want by double-clicking on it.

How to change the size of a column

Manually:

1. Click on the right side of the column at the top of the sheet (where the column is specified by letter) that you want to change the size of.
2. Drag mouse across to make the column wider or thinner.

Using the Format option:

1. Highlight the column(s) that you want to change the width of.
2. Click on the **Format** button in the Cells toolbar of the Home tab (it's to the top-right hand of the screen).
3. Click on **Column Width** and a popup box will appear.
4. Delete the current width with the **Backspace** key and pick a number of your choice, whether bigger or smaller.
5. If you click on **AutoFit Column Width** in the Format button, Excel will automatically change the width of the column(s) to the size of the widest data.

How to change the size of a row

Manually:

1. Click on the bottom of the row at the left side of the sheet (where the column is specified by number) that you want to change the size of.
2. Drag mouse across to make the column taller or shorter.

Using the Format option:

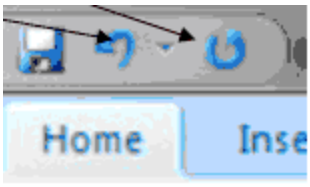
6. Highlight the row(s) that you want to change the height of.
7. Click on the **Format** button in the Cells toolbar of the Home tab (it's to the top-right hand of the screen).
8. Click on **Row Height** and a popup box will appear.
9. Delete the current height with the **Backspace** key and pick a number of your choice, whether bigger or smaller.
10. If you click on **AutoFit Row Height** in the Format button, Excel will automatically change the height of the row(s) to the size of the tallest data.

TIP Changing the size of a column or row also also counts as an edit that needs to be saved if you want the spreadsheet to be formatted the same way the next time you open the file.

Practice 5 Changing column and row size

1. Make Column E wider manually.
2. Make Column A wider using Autofit.
3. Change the height of Row 2 to 28.

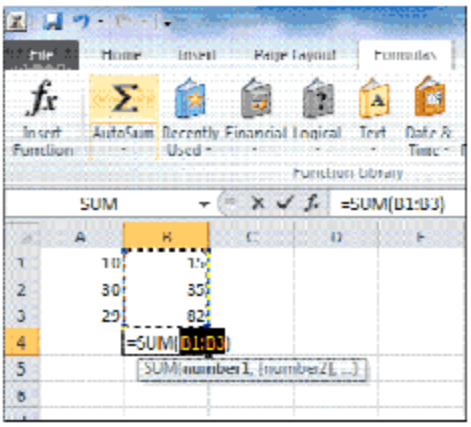
The Undo arrow can undo a mistake.



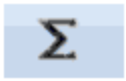
If you click the wrong button or make a typing error, click the Undo icon, which is found in the top left corner of the screen and is in the shape of a small, blue arrow pointing left. It will go back and undo the last thing you did (or more than that if you press it more than once) if you haven't saved the file. If you decide that you would rather not have pressed the Undo icon, the Redo icon, a small blue arrow pointing right, will appear. Clicking the Redo button will undo what you undid.

Using AutoSum for addition

AutoSum is a built in Excel formula for addition. AutoSum adds rows or columns of numbers together to calculate the total sum.



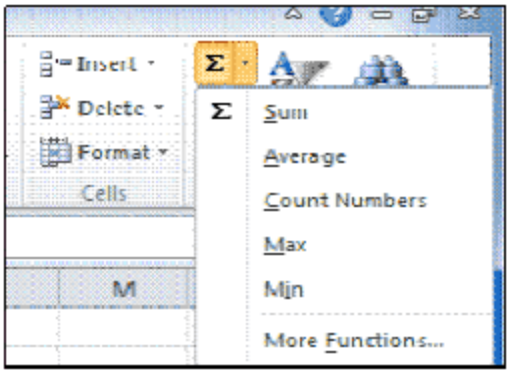
1. Highlight the cells you want to add together plus an extra blank cell the program can place the answer in.
2. Click on the **Formulas** tab at the top of the screen.
3. Click **AutoSum** button.



4. The sum will appear in the last cell you highlighted.
5. Clicking on the cell with the sum in it will allow you to see the formula for the sum in the Formula Bar.

How to do math calculations in Excel

1. **Use built-in math formulas like SUM**



Click on the small arrow to the right or below the AutoSum button to open math formulas menu. **Average** calculates the average value of the numbers in the rows or columns you highlighted. **Max** notes the largest number you typed and **Min** notes the smallest numbers you typed in the highlighted cells.

2. **Write your own math formulas**

Every formula in Excel must start with = (the equal sign). Use cell names and symbols in writing a formula. For example, if you wanted to add together your food expenses for July, August, and September, type the formula **=B3+C3+D3** in Cell E3. will give you the sum of the B3, C3, and D3 cells. As you type, a different colored box appears around each Cell and the Cell Name itself will change to its corresponding color in the formula. This allows you to check whether all the Cell Names you type into the formula are correct. The formula is shown in both Cell E3 and in the Function bar above the

spreadsheet.

Click the **Enter** key on your keyboard. Look at where you typed the formula in Cell E3; the sum will be there. However, if you look at the Function bar at the top of the spreadsheet, it will still contain the formula you typed in.

How to write basic formulas

Addition: =B3+C3

Subtraction: =E8-E3

Multiplication: =E8*4 NOTE- Some formulas can include a number as a value, instead of a Cell Name.

Division: =E6/E8

Copy formulas with Autofill

Excel will fill cells automatically to copy a formula and fill in numbers. The FILL HANDLE is a small black square in the lower right corner of the highlight area. Point at the fill handle with the mouse to turn the cursor into + .

Click the + and drag your mouse to fill the formula into empty cells.

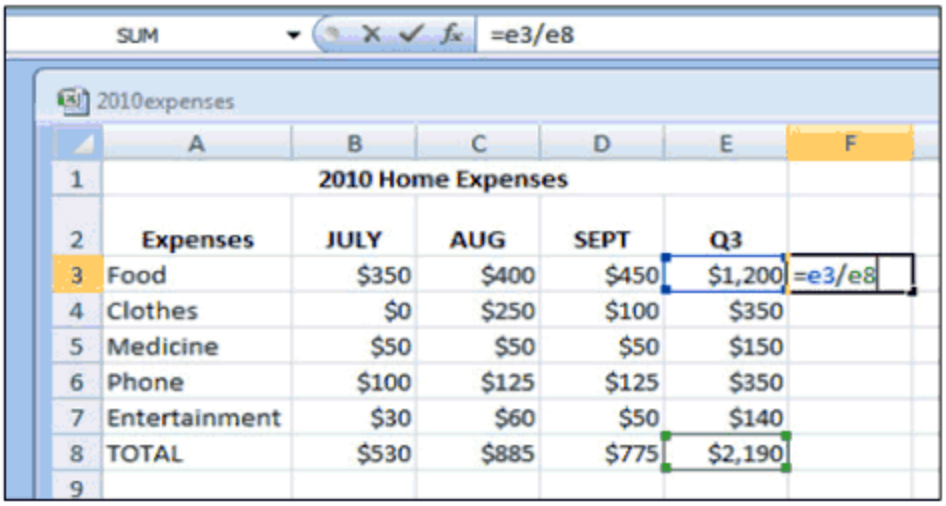
Practice 6 Writing math formulas

Use Excel spreadsheet from Practice 3 to answer the questions below. Use AutoSum, write a formula and/or use Autofill to answer.

1. Total Q3 expenses for Food, Clothes, Medicine, Phone, and Entertainment
2. Total expenses for July, August, and September
3. Total Q3 expenses (HINT: Sum should be in Cell E8)
4. Total Q3 expenses minus Medicine expenses
5. Total September expenses minus Food expenses
6. Q3 Food expenses are what percentage of total expenses? (Hint: Write as a

division formula.)

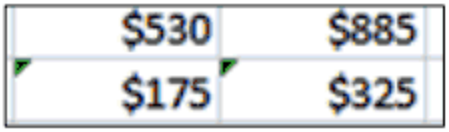
Answers to Practice 6



	A	B	C	D	E	F
1	2010 Home Expenses					
2	Expenses	JULY	AUG	SEPT	Q3	
3	Food	$350	$400	$450	$1,200	=e3/e8
4	Clothes	$0	$250	$100	$350	
5	Medicine	$50	$50	$50	$150	
6	Phone	$100	$125	$125	$350	
7	Entertainment	$30	$60	$50	$140	
8	TOTAL	$530	$885	$775	$2,190	
9						

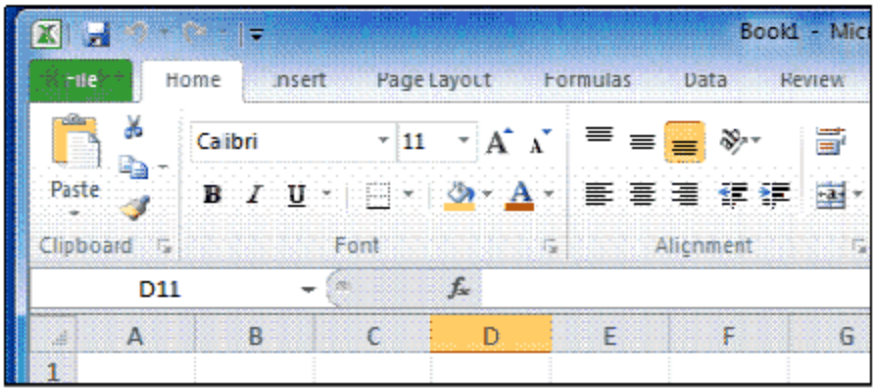
You can even use a multiplication formula to calculate your annual budget: **=E8*4**

Error messages in Excel



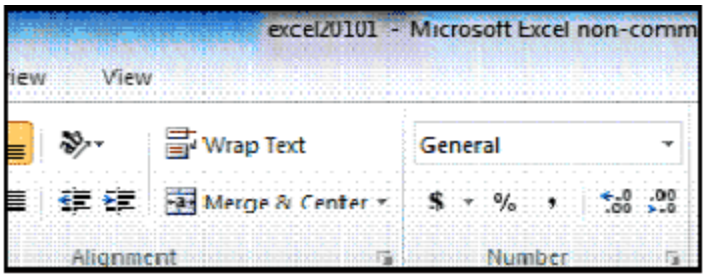
Excel marks a formula with a math error or a cell with a formula that differs from formulas in the cells around it with a GREEN TRIANGLE in the top left corner of the cell. Click on the cell with the green triangle and an exclamation point appears. Excel may show you how to fix the formula. If not, you can go the Function bar and edit the formula yourself. If you're certain that the formula is correct, ignore the green triangle. It will not show when you print.

Formatting in Excel

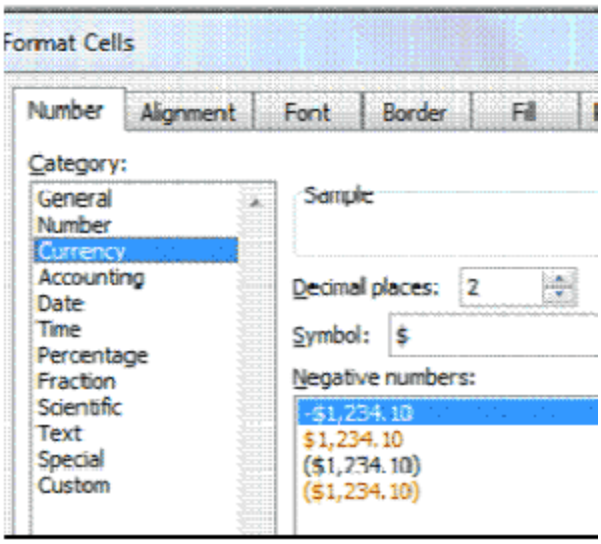


In Excel, you can change the font size, typeset, and color of your data. You can bold, italicize, and underline your data. You can align data to the left, right, or center.

How to add $ (dollar sign) to data



1. Highlight all the cells you wish to format.
2. In the **Numbers** menu, click on the small downwards arrow to the right of the button in the shape of a dollar sign **($)**. This is the **Accounting Number Format** button.
3. You will be given the options of using the currency symbols of American dollars, British pounds, the Euro, or more. All the cells you have highlighted will now be shown as currency.



How to convert data into percentages:

4. Highlight all the cells you wish to format.
5. In the **Numbers** menu, click on the button in the shape of the percentage symbol **(%)**. This will change the data in the cells you have highlighted into percentages.

For example, 1 will become 100%, 10 will become 1000%, and .1 will become 10%.

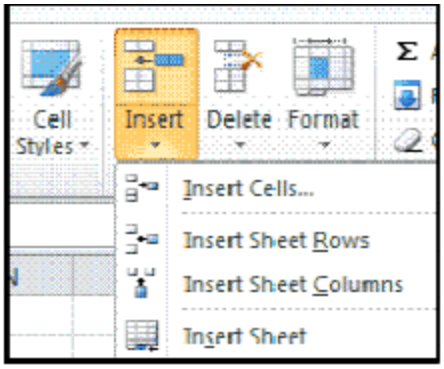
6. If you want to change how many decimal places the percentage will go up to, click on the small arrow in the lower right corner of the Numbers menu. This will open up the **Format Cells** dialog box. In the **Numbers** menu, click on **Percentage** in the list of options. The right side of the dialog box will now have a menu where you can increase or decrease the number of decimal places your percentages will go up to.

Practice 7 Formatting activities

1. Add dollar signs ($) to all expense numbers.
2. Bold all of the data in Row 2.
3. Center all of the data in Row 2.
4. In Cell F3, enter the formula **=E3/E8**. The answer will be a decimal. Change the format of Cell F3 to a percentage with zero decimal places.

How to insert and delete rows and columns

Insert a column



1. Highlight the column to the right of where you want the new inserted column to appear.
2. In the **Cells** menu at the top of the screen, click the small arrow underneath the **Insert** button.
3. Click on **Insert Sheet Column**.
4. A blank column will appear to the left of the column you had highlighted.

Insert a row

1. Highlight the row below where you want the new inserted row to appear.

2. In the **Cells** menu at the top of the screen, click the small arrow underneath the **Insert** button.
3. Click on **Insert Sheet Row**.
4. A blank row will appear above the row you had highlighted.

TIP: To insert a few columns or rows, highlight as many columns and rows as you want to insert. For example, if you want to insert 3 columns, highlight 3 columns before doing Step 2 above. If you want to insert 3 rows, highlight 3 rows instead.

Delete a column or row

1. Highlight column(s) or row(s) you wish to delete.
2. In the **Cells** menu, click the **Delete** button.

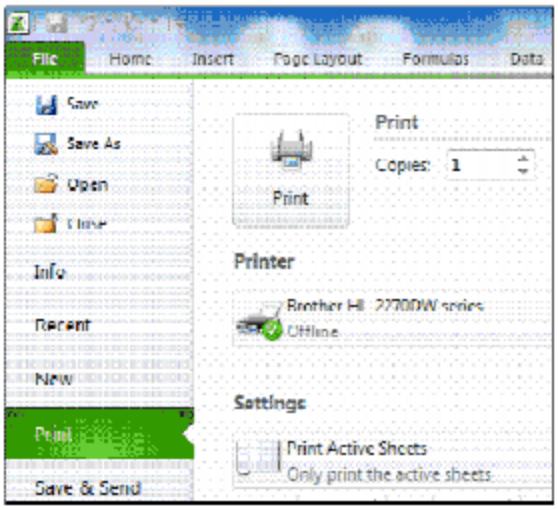
TIP: Excel formulas and formatting are still okay after inserting and deleting columns or rows.

Practice 8 Inserting and deleting

1. Insert 1 column between Column A and Column B. Label it June.
2. Insert 2 columns between Column D and Column E.
3. Delete one of the columns added in Step 2.
4. Insert 1 row above the row containing the word Entertainment. Label it School.
5. Use the Undo button to delete the row added in Step 4.

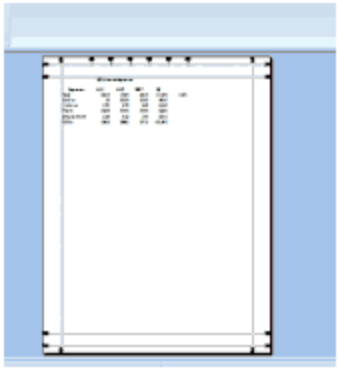
How to print

1. Remember to save your work before printing.
2. Click **File** button in upper left corner of screen.
3. Select **Print** from menu.
4. Make sure your margins, orientation, and number of copies is to your liking. Also, check



the right side of the print preview to see how your printed pages will look.

5. Click **Print** button at the top center of the print preview.



Remember: In order to print, you must have a printer attached to your computer as well as printer software installed on the computer.

For more help and practice

In Excel, click on the blue **?** help button at the top right of the screen.

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http://www.excelcentral.com/ Sound and video plus slides