Introduction to Excel 2007 for ESL students

Download at   http://www.rtlibrary.org/excel2007esl.pdf

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What is Excel?

Excel is a computer software program from the Microsoft company. It is one of 4 popular Microsoft Office programs.

Excel makes it easy to

- do math calculations
- create a budget
- balance a checkbook
- track inventory
- collect research statistics
- organize or sort records
- analyze data and do "what if?" calculations
- add style to the data
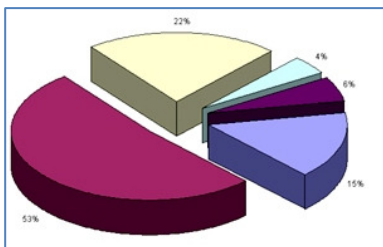
Excel can create a chart or graph from data

Excel is used around the world in businesses, schools, governments, organizations and in the home.

What is Excel 2007? The computer program version that was introduced in the year 2007. This picture is the symbol for Excel 2007.

What we will learn in Introduction to Excel 2007

HOW TO--

open and save Excel files

enter data and move around a spreadsheet

use Excel formulas

Write basic math formulas

edit and identify mistakes

change the style and format of data

print a spreadsheet

find help for questions

How to Open Excel 2007

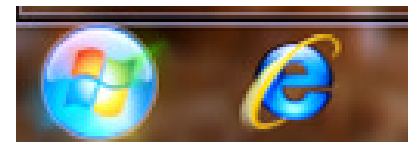1) **Click button** in bottom left corner of computer screen

In Windows XP, click Start

In Windows Vista or Windows 7 ,click

Windows button on left

2) **Click All Programs** to open

3)Scroll to find Microsoft Office in program list

4) Click **Microsoft Office Excel 2007** to open

TIP: Right click Excel on list and select PIN to Start Menu.

Excel 2007 will be put on the Start Menu. Just Click to open.

When you open Excel, a new worksheet opens

An Excel page is a grid with COLUMNS, ROWS and CELLS. It looks like an accounting spreadsheet
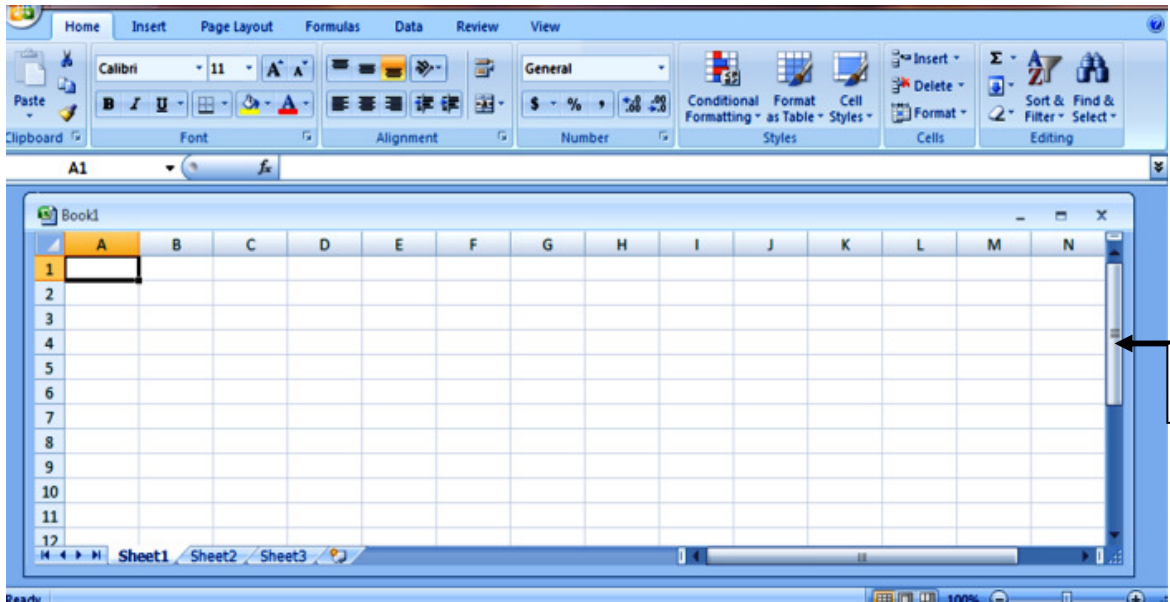
Scroll bar
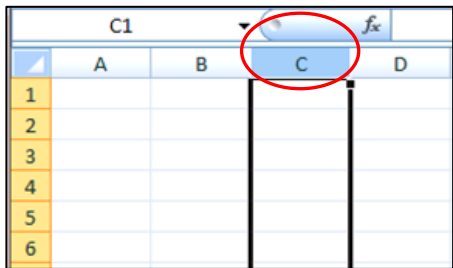
COLUMN is one vertical space from top to bottom in the spreadsheet. Letters indicate the COLUMN. COLUMN C is highlighted.

A **ROW** is one horizontal space running left to right across the sheet. Numbers indicate the ROW. ROW 4 highlighted
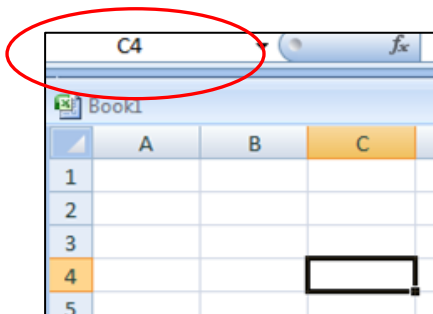
A **CELL** is the black box. A CELL NAME is the column letter and the row number. When you click in a cell, you can see the cell name in the cell name box C4 cell highlighted.

How to Move Around the Excel sheet

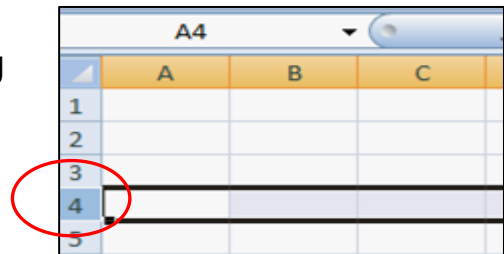There are two scroll bars. They are on the **right side** and on the **bottom** of the screen. The scroll bar helps you to **move up** or **down**, **right** or **left**, very fast.

To scroll down, click   To scroll up, click

To scroll right or left, click

MOVE TO A CELL Move your mouse and Left Click into the cell

How to Move around using the Keyboard

2) TO MOVE UP and DOWN a COLUMN

Click Up Arrow ⇧ on keyboard
 to move UP one cell

Click Down Arrow ⬇ on keyboard
 to move DOWN one cell

3) TO MOVE ACROSS a ROW

Click Tab key to move one cell at a time across a row

Click arrows on keyboard to move ⇦ LEFT or

RIGHT ⇨ one cell at a time

4) JUMP TO A CELL by typing the CELL NAME in the white CELL
NAME box, then hit ENTER

Moving around in Excel

Open Excel 2007

Click on Column B

Click on Row 6

Click on Cell C6

Use the Tab key to move to E6

Move from E6 to A8

Scroll down to Row 20

Scroll over to Column P

Type L30 in Cell Name box and hit enter

Mouse Practice: How to Select or Highlight cells in Excel

1. Put the cursor to the left of words or numbers you select.

2. Put your first finger on the left mouse button.
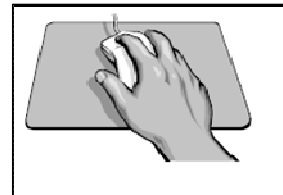
3. Hold down the left mouse button.

4. Move the mouse across the words or numbers.

5. Lift up your finger.

6. You see the 1st cell is whte

How do I deselect words or numbers?

After you make changes to a word, click on the white part of the screen. When you deselect words, they look like this:

Cells are no longer blue

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 a cell.

2. Type a word or a number.

3. Press Enter.

4. The cursor moves to the cell below.

5. Type another word.

6. Press the arrow keys on the keyboard to move to the cell beside

Editing and Deleting Data

How do I change data I typed in a cell?

1. Click the cell with the data you want to change.

2. Type different data in the same cell.

3. Press Enter

How do I change just one or two letters or numbers in the cell?

1. Double click the cell with the letter(s) or number(s) you want to change.

2. Click before or after the letter(s) or number(s) you want to change.

3. Backspace or delete what you want to change.

4. Type the new letter(s) or number(s).

5. Press Enter

How do I delete data?
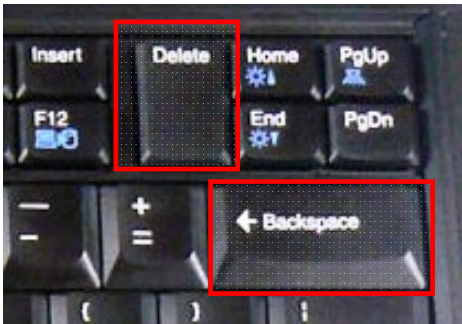
1) In a cell, use **Backspace** key to delete a character at a time & retype **OR**

2) Place cursor in the cell or highlight some cells and press **Delete** key **OR**

3) Highlight cell(s) to delete and click "**Delete**"

How do I change data in a cell?

1) Click in formula area of the Formula bar.
2) Backspace to delete and retype the data

Click here in formula bar to change

9

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					

NOTES

Leave Row 1 blank for now—We will add the title later

You must type the 0 in B4:

Do not leave empty cells in an Excel spreadsheet

When you type the word "Entertainment", it looks like it won't fit:

We will learn how to FIX the COLUMN FORMAT soon

It is better to add formatting ($ or commas or centering)

AFTER you type the numbers in the cells

Save a new Excel file

How to save a file for the first time

1) Click the Office button in top left corner
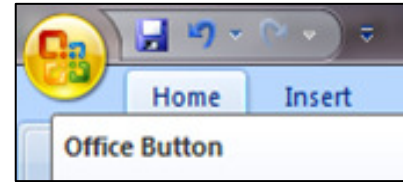
2) Point to "Save as" option

3) Click "Excel 97-2003" option

This option formats your file so that it can be opened by other computers that have Excel software versions from 1997 through 2010
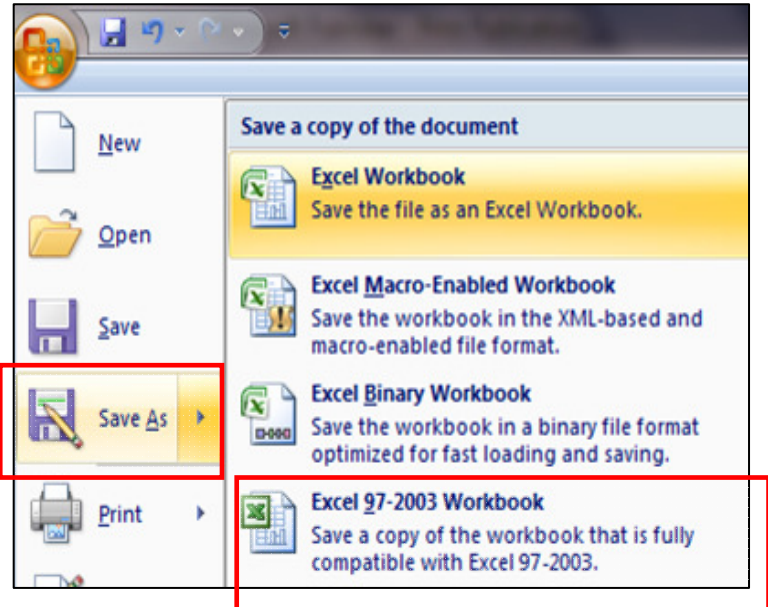
4) MY DOCUMENTS opens. This saves file in MY DOCUMENTS in computer.

5) Click in FILE NAME box to name your file.

6) Select all the words in the File name box.
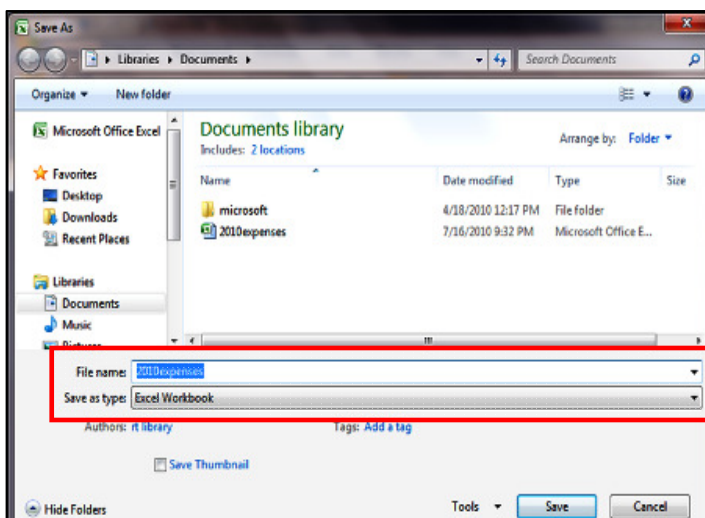
7) Press DELETE

8) Type a file name – A few words that describe the file

For example 2010 expenses

9) Click SAVE

10) See the name of your file top center, above worksheet

How to Save an existing Excel file

TIPS: Save your work every few minutes in Excel

The 3 Ways to Save steps work for Excel and all Microsoft Office programs

Do not use "Save As" to save a file that you have named

There are 3 ways to save your named Excel file

1) Click Office Button and then Click "Save"

The file will be saved in the same place

MY DOCUMENTS and in the same file format

(*For example,* Excel 1997-2003 format) as before

UNLESS you change the format.
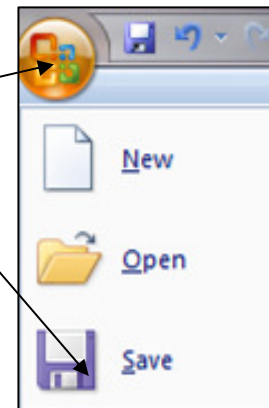
2) Click Save button
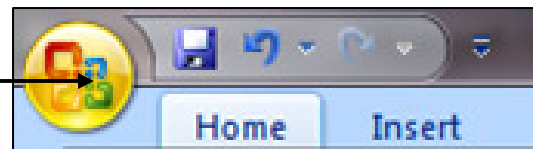
3) Click the Control (ctrl) key and
Letter S key on the keyboard to save
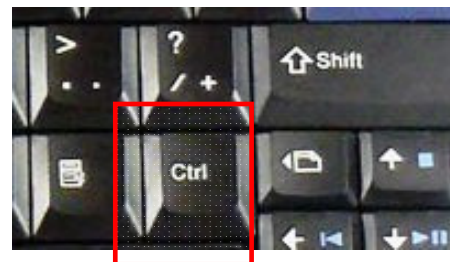
How to Exit Excel

1. Click ☒ in the top right corner.

2. If you made changes to the file,
   this box will appear
3. Click No if you do not want
to save changes.
 4. Click Yes if you do.
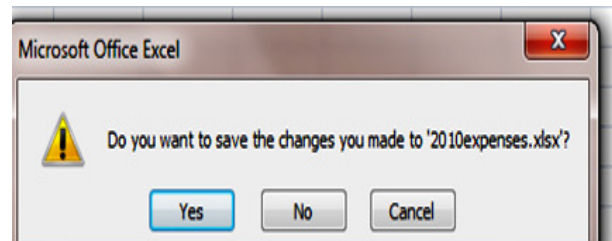
Save the expenses worksheet you typed in Activity 2

Remember to Save as "Excel 1997-2003" option

Type "2010 expenses" as the File Name

Exit Excel

Open All Programs and Open Microsoft Office Excel 2007

NOTE-- A new, blank Excel worksheet will appear

How to Open an existing Excel file
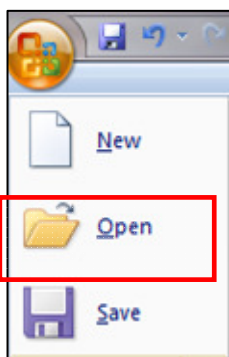
1) Click the Office button to open the menu

2) Click Open and MY DOCUMENTS window opens

3) Click on Excel file "2010 expenses" and click OPEN

4) Save the open file
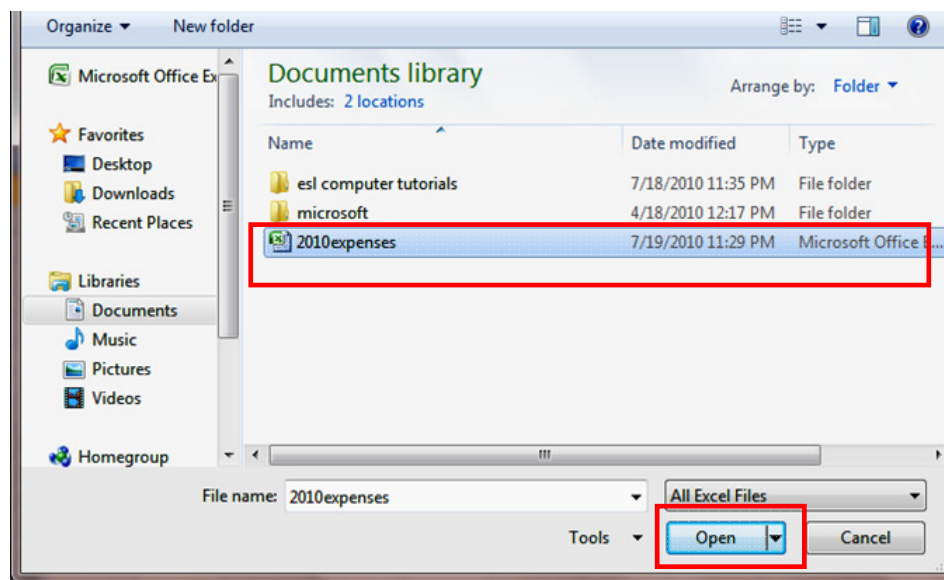
Change the Size of a Column or Row

1. COLUMN: Click on the right line of the column

2. You see this: ✛

3. Drag the mouse across to make column wider.

4. You see the width of the row.

5. Lift your finger.
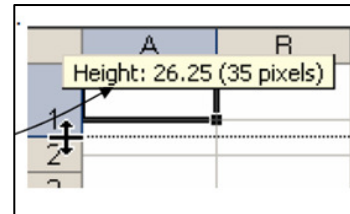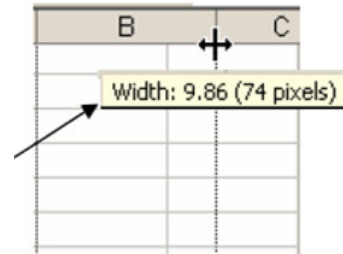
ROW: Click on the bottom line of the row
 in the Row Heading.

How to Change Size with Autoformat: Click the Format menu.
Autoformat will change the width or a column to the size of the widest data

**1)Column A is too narrow to fit
data in Cell A7 "Entertainment"**

**2) Highlight Column A
3) Click Format menu on top
4) Click Autofit Column**
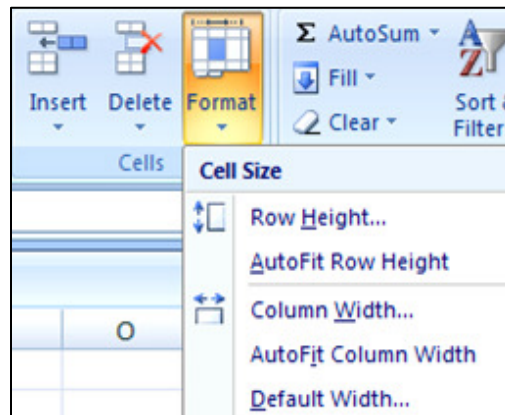
How to Set Row Height

1) Highlight the Row(s) to change ROW 2 here

2) Click **FORMAT** button on top right
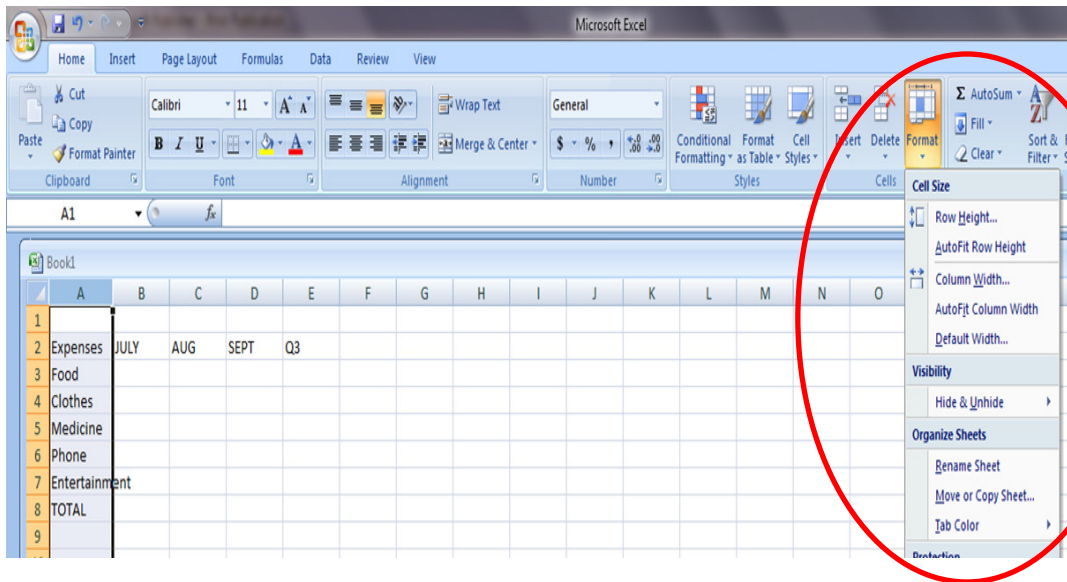
3) Select **Row Height** option and popup box appears
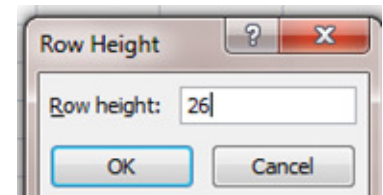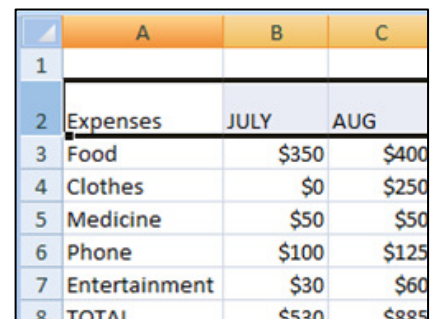
4) Backspace to change row size to 26

5) Click Ok to save the change

NOTE—Only Row 2's height is Taller. Why?

Only Row 2 was highlighted to be changed

Changing Column and Row Sizes

1)   In your Excel worksheet , make COLUMN E wider, using

2)   Make COLUMN A wider using FORMAT button and AUTOFIT

3) Change the height of ROW 2 to 28

Bonus Practice-The Undo and Redo buttons

In Excel, it is easy to fix a mistake Using the UNDO and RE-DO buttons

These arrow buttons are in the top left corner.

The arrows can be seen when changes are made to the file, UNTIL THE FILE IS SAVED
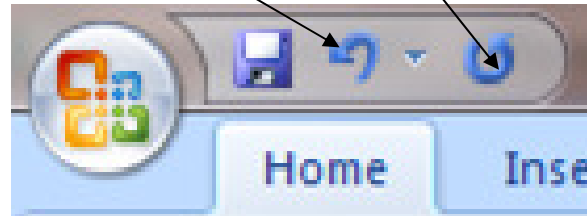
If you type or click a button by mistake, click the UNDO backwards arrow button, and you will return to the previous step.

TIPS: You can go back several steps with Undo, if you did not save your changes

All Microsoft Office programs have the blue arrow UNDO and REDO buttons.

Using Autosum for Addition
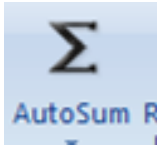
 AUTOSUM is a built-in Excel formula for addition. AUTOSUM adds rows and columns of numbers and calculates the total

1. Select all of the cells you want to add together plus the last cell where you want to put the answer.

2. Click AUTOSUM

3. Excel highlights the numbers to be added.

4. Click in the cell that has the total.

5. Look in the box beside fx. You see the Formula.
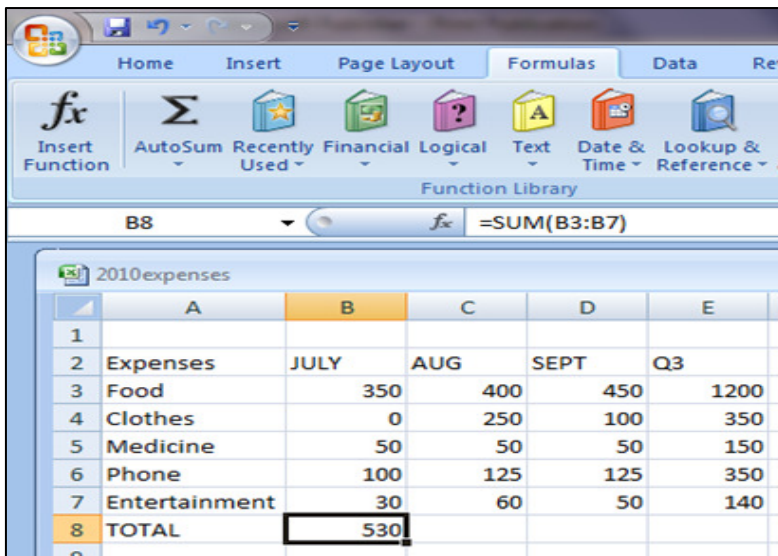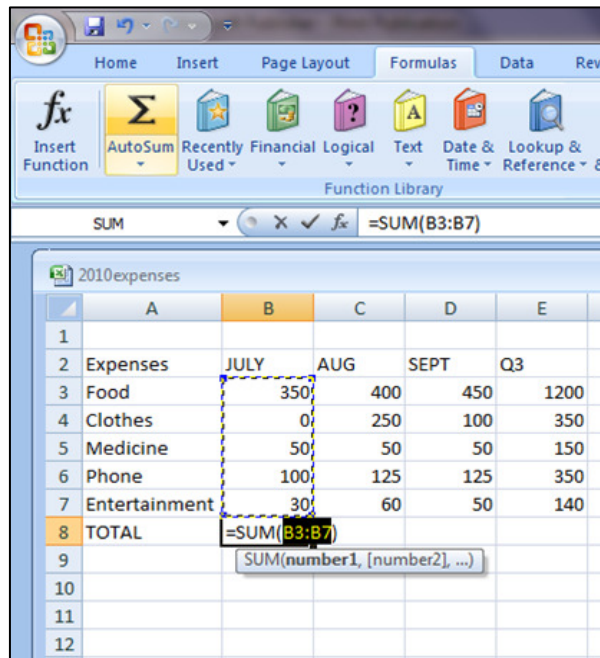
How to do math calculations in Excel

1) Excel has built-in general math formulas like AUTOSUM
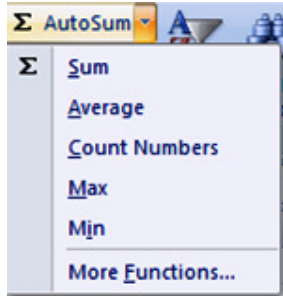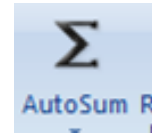
Click on AUTOSUM menu for more built-in formulas
AVERAGE calculates the average value of the numbers in the row or column you highlighted

MAX notes the largest number and **MIN** the smallest number in the cells you highlighted

2) You can also write your own formulas

Every formula in Excel must start with = (the equal sign)

Use CELL NAMES and symbols when writing a formula
=B3+C3+D3

Use keyboard keys for math operation symbols
NO SPACES between cell names and symbols

* AND Hold down Shift key for Multiplication

- for Subtraction

= Equal sign
+ AND Hold down Shift key for Addition

/ for Division or fractions

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How do I type a formula in a cell?

Type Formulas in the cell where you want the result to be

Example: Add Food expenses for July, August and September
1) In cell E3, type this formula   **=B3+C3+D3**

As you type, a colored box appears around each CELL NAME in formula.
Why? So you can check that the CELL NAMES are correct

SUM		X ✓ fx	=b3+c3+d3	
A	**B**	**C**	**D**	**E**
1		2010 Home Expenses		
2 Expenses	JULY	AUG	SEPT	Q3
3 Food	350	400	450	=b3+c3+d3
4 Clothes	0	250	100	
5 Medicine	50	50	50	

2) Look: The formula shows in cell E3 and also in the FORMULA BAR above

SUM	▼	○ X ✓ fx	=b3+c3+d3

3) Click Enter key on keyboard

4) Now the sum 1200 shows in Cell E3

5) Click in Cell E3 where you typed the Formula. Both the formula and
 the SUM result are stored there

E3	▼	fx	=B3+C3+D3	
A	**B**	**C**	**D**	**E**
1		2010 Home Expenses		
2 Expenses	JULY	AUG	SEPT	Q3
3 Food	350	400	450	1200
4 Clothes	0	250	100	
5 Medicine	50	50	50	

Type formulas by point and click cells method

Example: Add Food expenses for July, August, September

F7			fx	
A	B	C	D	E
1		2010 Home Expenses		
2 Expenses	JULY	AUG	SEPT	Q3
3 Food	350	400	450	
4 Clothes	0	250	100	
5 Medicine	50	50	50	

1) Click cell E3 and type =

2) Click cell B3

3) Type +

4) Click cell C3

5) Type +

6) Click cell D3

7) Click Enter key OR click Green check mark beside fx

8 Look up in the formula bar to see the formula

SUM	▼	X ✓ fx	=b3+c3+d3

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, fill in a date or number

FILL HANDLE Find the small black square in the lower right corner of the highlighted area and click for **+**

Grab the **+** Fill Handle and drag with your mouse to fill the formula in empty cells.

	E3			f_x	=SUM(B3:D3)	
	A	B	C	D	E	F
1			2010 Home Expenses			
2	Expenses	JULY	AUG	SEPT	Q3	
3	Food	350	400	450	1200	
4	Clothes	0	250	100	350	
5	Medicine	50	50	50	150	
6	Phone	100	125	125	350	
7	Entertainment	30	60	50		
8	TOTAL	530	885	775		
9						
10						
11						
12						

1) In a Cell, write the formula for the first column or row and click Enter

2) Stay in that cell, but move your mouse to the lower right corner of the cell until the **+** appears

3) Left click with your mouse and Hold down to Drag or Highlight all the columns or rows that need the formula

4) Stop highlighting and release

5) Click on some of the highlighted cells. See how Excel changes the formula to be correct for every row

TIPS: AUTOFILL is a fast way to add columns or rows when you have the same calculation to do in every column or row
AUTOFILL is great for filling in months or number sequences on a sheet
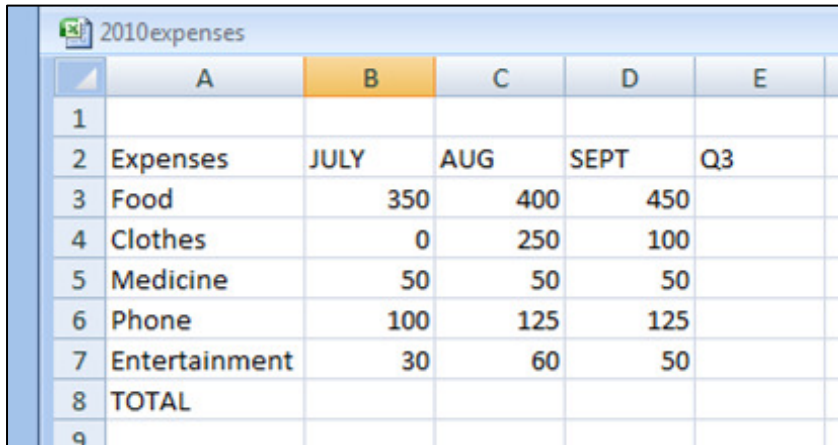
Use this expense worksheet to answer the questions below
Use Autosum, Autofill or write a formula

2010expenses				
	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					

1) Total Q3 expenses for Food, Clothes, Medicine, Phone, Entertainment

2) Total expenses for July , Aug , Sept

3) Total Q3 expenses (E8 amount)

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 division formula

7) Write a formula to estimate total 2010 expenses

Check Answers to Practice 5

	A	B	C	D	E	F
1		2010 Home Expenses				
2	Expenses	JULY	AUG	SEPT	Q3	
3	Food	350	400	450	1200	55%
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	2190	
9						

SUM   fx   =e3/e8

2010expenses

	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						

How to write a division formula or a fraction

How to write a multiplication formula: Example calculate annual budget

=F8*4

Error messages in Excel

Format Painter
Clipboard   Font   Alignment

SUM   fx   =f8*4

2010expenses

	A	B	C	D	E	F
1		2010 Home Expenses				
2	Expenses	Q1-4	JULY	AUG	SEPT	Q3
3	Food		$350	$400	$450	$1,200
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	=f8*4	$530	$885	$775	$2,190
9						

Question: I typed a formula in a cell, and there is a green triangle in the top left corner of the cell. Why?

$530	$885
$175	$325

Excel will mark a formula that has a mathematical error, or a cell that has a formula that differs from the formulas in the cells around it

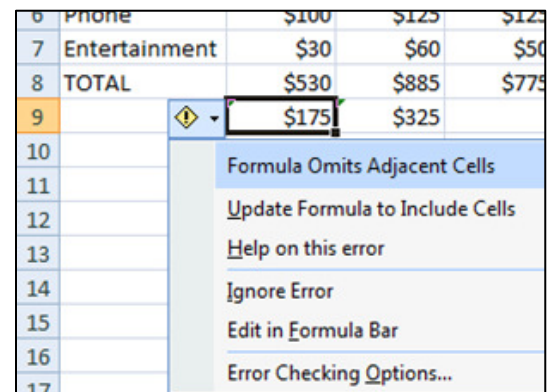Click on Cell with green triangle. exclamation point appears

Click on ❗ and Excel will give more information
about the error

Excel will show how to fix the formula OR

Go to the formula fx bar and edit and redo the formula OR

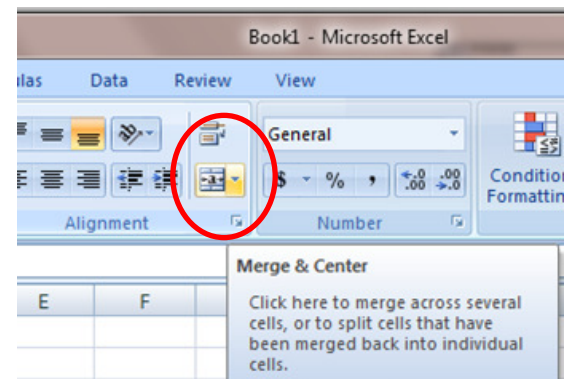If your formula is correct, you can ignore the green triangle

It will not show when you print the worksheet

		$100	$125	$12
6	Phone			
7	Entertainment	$30	$60	$50
8	TOTAL	$530	$885	$775
9		$175	$325	

Formula Omits Adjacent Cells

Update Formula to Include Cells

Help on this error

Ignore Error

Edit in Formula Bar

Error Checking Options...

How to Combine or Merge Cells
This merges multiple single cells to create one large cell for Headings and comments

1. Highlight the cells to combine into one cell

2. Select the Merge and Center button

3. If you have data in only one cell, that data will be in the center of one long cel

Book1 - Microsoft Excel

las   Data   Review   View

General

Merge & Center

Click here to merge across several cells, or to split cells that have been merged back into individual cells.

Formatting in Excel

In Excel, you can change the font size, typestyle and color of your data

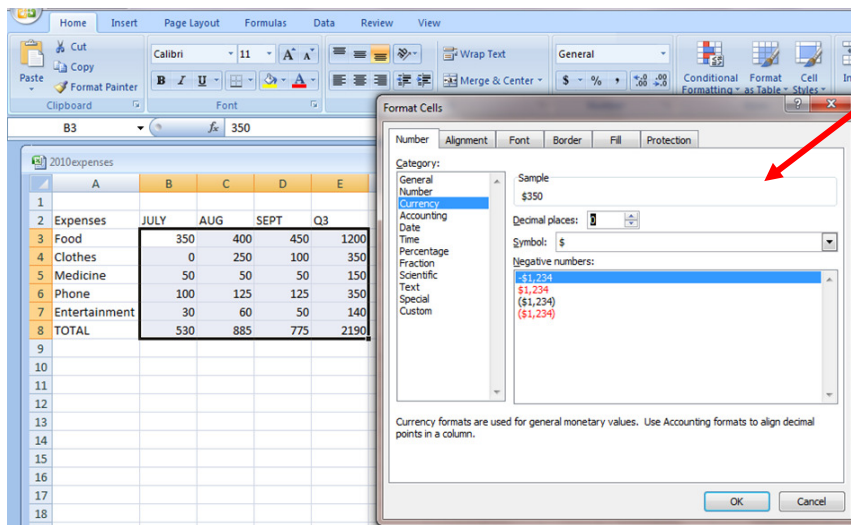You can add Bold, Italics or different / background colors

You can align \ data in the center, / left or right
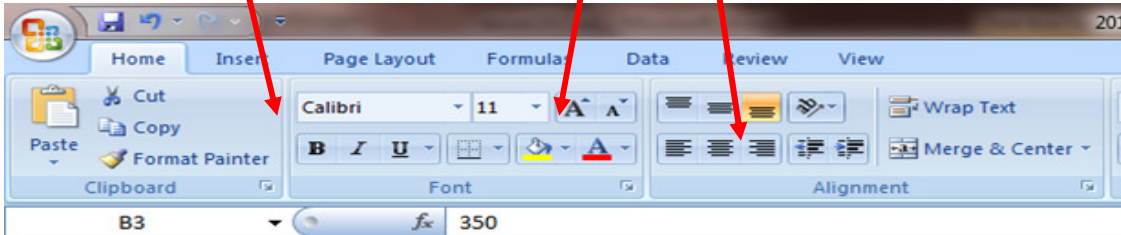
You can add $ and % signs, select a date and time

How to add $ signs

1) Highlight all the cells to format

2) Click Format on top right

3) Select format cells

4) In Format window, click to select Currency

5) Click OK to save changes and close

Click OK to save changes

Use this Excel worksheet data to do activities below

	A	B	C	D	E
1		2010 Home Expenses			
2	**Expenses**	**JULY**	**AUG**	**SEPT**	**Q3**
3	Food	350	400	450	1200
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	2190
9					

1) Add dollar signs to all expense numbers

2) Add Bold formatting to data in Row 2: CELLS A2 through E2

3) Align Center all data in Row 2

4) In F3, enter the formula =e3/e8. The answer will be a decimal

   Change the format of F3 to a percentage with 0 decimal places

5) **Try the Merge and Center button:**
   Highlight Row A1 through E1. Click Merge and Center button.

   Type "2010 Home Expenses" in A1
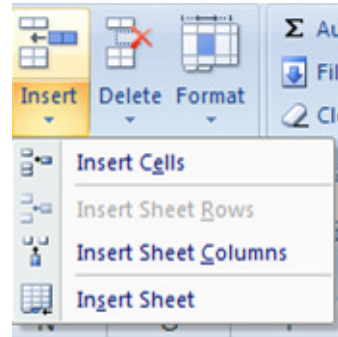
How to Insert and delete

Insert and Delete
It is easy to add (insert) or remove (delete) columns or rows in Excel

Insert a column

1) Highlight the column to the right of where the new, inserted column to appear

2) Click the Insert button on top

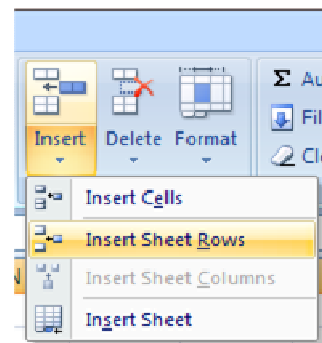3) Click Insert sheet columns

4) One blank column appears to the left

To insert a few columns, highlight the # of columns you want to add

Example: To insert 3 columns, highlight 3 columns and click insert

Insert a row

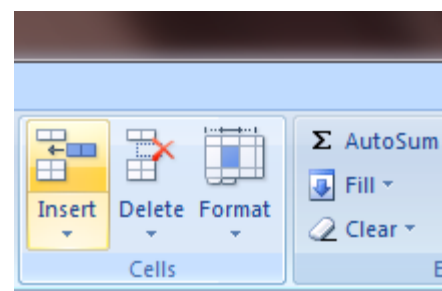1) Highlight row below where new row will go
2) Click the Insert button on top

3) Click Insert sheet row

4) One blank row appears above

TIP: Excel formulas or formatting are still okay after insert and delete

Delete a column or row
1) Highlight area to delete

2) Click Delete button on top

Inserting and Deleting practice

Use this Excel worksheet for activities below

|	A	B	C	D	E
1			2010 Home Expenses		
2	Expenses	JULY	AUG	SEPT	Q3
3	Food	350	400	450	1200
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	2190
9					

1) Insert 1 column between A and B. Label it June

2) Insert 2 columns between D and E.

3) Delete 1 of the columns added in 2)

4) Insert 1 row above entertainment. Label it School.

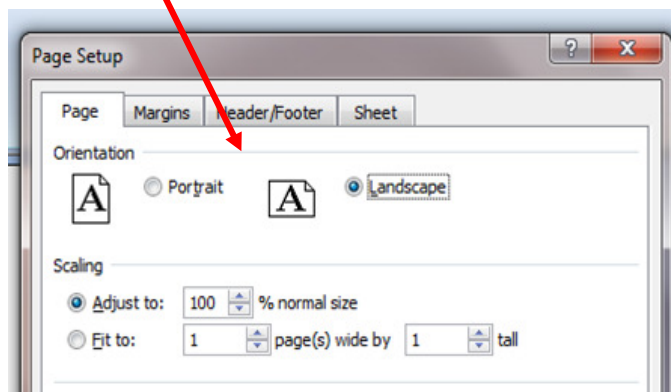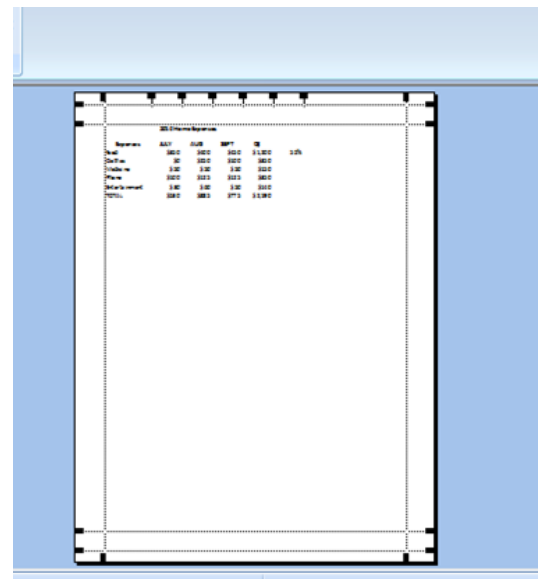5) Use the undo (backwards blue arrow) to delete row added in 4)

How to Print
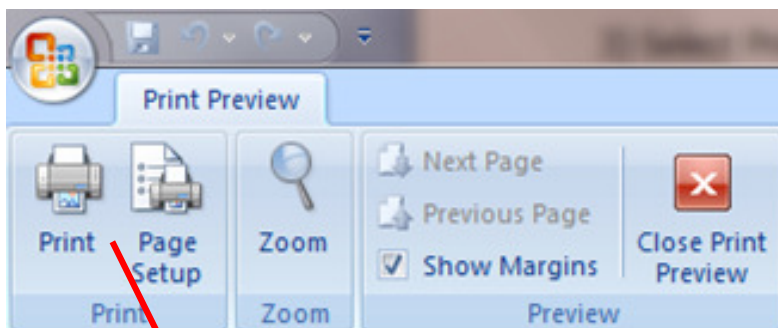
It is a good idea to look at your Excel worksheet before you print it

You can do this in Print Preview

1) SAVE your work

2) Click Office button in top left corner

3) Select Print from Menu

4) Select Print Preview
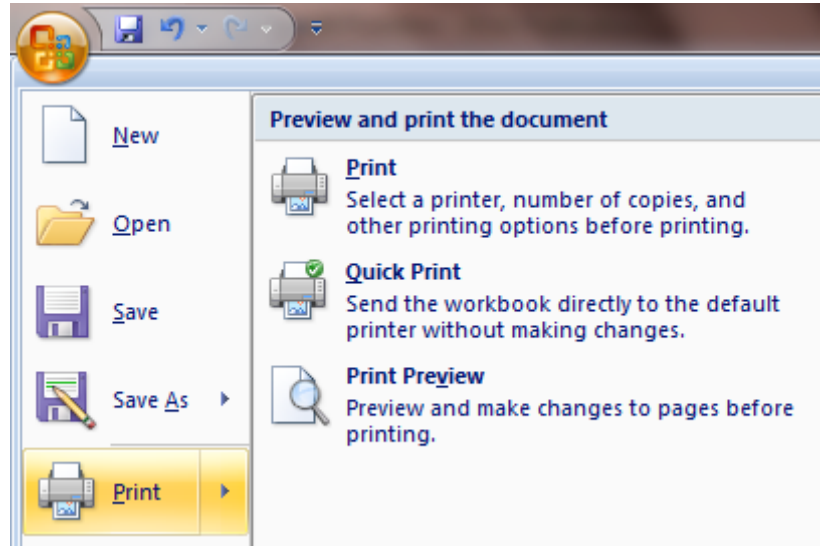
5) Check VIEW MARGINS, to adjust placement of Excel worksheet on page

6) Click PAGE SETUP to change page layout from ☐ to ☐

Open and Print an Excel worksheet

Use any saved Excel worksheet for these activities

1) Open Excel 2007

2) Open a saved document

3) Save the document

4) Click Office button to open print

5) Select print preview

6) View margins, change margins of document and save

7) Open Page Setup and change Print orientation

8) Click Print to send Excel document to your printer

NOTE: You must have a printer attached to your computer,

 and printer software installed on your computer

 to be able to print

Congratulations! You have completed Introduction to Excel 2007

Help and More Information

In Excel, click the blue **?** button in top right corner
if you have internet access on your computer

? button links to free online handouts and videos from Microsoft Office

http://office.microsoft.com/en-us/excel-help/CL010072903.aspx

Look for Excel books and resources at your local library. Good Luck!