

Introduction to

**Excel**



6/2005

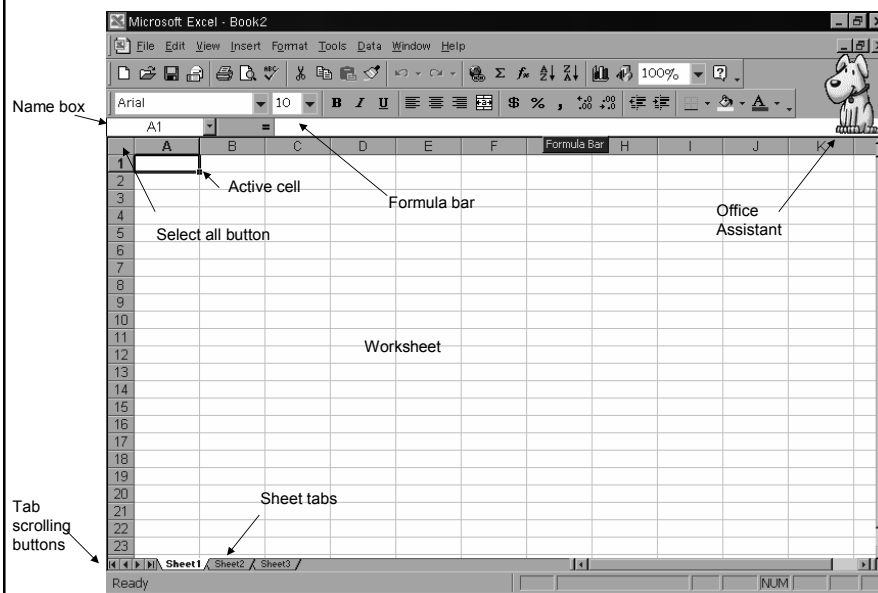
## Things to Cover

- Excel window elements
- Menus
- Open a new workbook/worksheet
- Navigating thru a worksheet/shortcuts
- Entering Data
- Formatting
- Formulas
- Printing

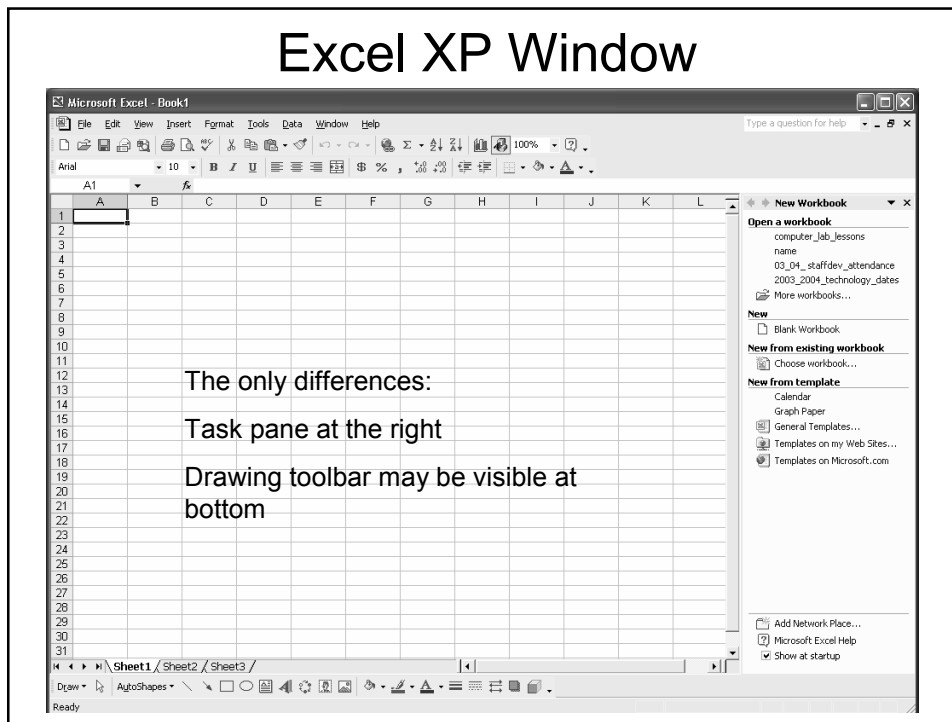
# Toolbars

- When using Excel (or any Office 2000/XP program) it is beneficial to have your Standard and Formatting toolbars on separate rows
  - The default is for these two to share one row
- Click on Tools, Customize, Options tab
  - **For Office XP**
    - **Insert** a check in the box “Show Standard and Formatting toolbars on 2 rows”
  - **For Office 2000**
    - **Remove** the check from the box “Standard and Formatting toolbars share one row”
- Click Close

# Excel 2000 Window Elements



## Excel XP Window



## Menus

- Excel has the same “personalized” menus as in Word. Clicking on the double arrow will show all the choices available for that menu.
- You will find that all of the Office 2000/XP menus operate this way
- When you see ... after a menu choice – that means a dialog box will open with that choice
- Don't forget to use the Help/Office Assistant

## Open a new workbook/worksheet

- Excel 2000 **cannot** open Quattro Pro 8 documents (Help says yes but it is wrong) Excel can only open versions thru QP 5.0
- Open a new workbook – File, Open – or click on the “blank sheet” on the far left of the toolbar
- This opens a worksheet
- A *worksheet* is the are where you enter data, the *workbook* is where the worksheets are stored

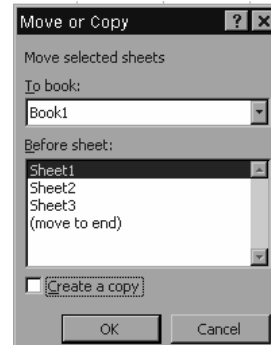
## Adding/renaming a worksheet

- A new document will have 3 “sheets” named Sheet 1, Sheet 2, Sheet 3
- To add more sheets, Insert, Worksheet
- To rename from Sheet 1 to ????
- Double click on the Sheet 1 tab, this will “select” or highlight it
- Type in new name
- Hit Enter



## Move or Copy a worksheet

- You can move or copy a worksheet
- Click the Sheet to move/copy
- Click **Edit, Move or Copy Sheet**
- To Move
  - You can choose placement
  - Make a selection
- To Copy
  - Put a check in the Create a copy box
- Click OK



## Navigating thru a worksheet

- You can move to specific cells by keystroke or mouse click.
- Using keystrokes and single mouse clicks can be more accurate than using the mouse to drag to select a group of cells.
- Following is a list of shortcuts

### Moving thru the worksheet

**Enter or down arrow** – moves down one cell

**Right Arrow or Tab** – moves right one cell

**Left Arrow** – moves left one cell

**Up Arrow** – moves up one cell

Page Up – up one screen

Page Down – down one screen

Ctrl + Right Arrow – to last column in worksheet (IV – 256 columns per sheet)

Ctrl + Down Arrow – to last row in sheet (65536 rows in sheet – 16.7 million cells)

Ctrl + Left Arrow – to first column in worksheet

**Ctrl + Home** – returns to A1

Ctrl + End – to last cell that has been active (even if it no longer holds data)

**Home** – to beginning of current row

Alt + Page Up – left one screen

Alt + Page Down – right one screen

**F2** – puts selected cell in Edit mode

### Selecting Cells

**Left mouse click** – selects a single cell

Shift + Arrow key – selects range of cells in row and/or column by holding Shift and clicking arrow to move

**Shift + Click** – select an area – Click w/mouse on first cell of area to be selected, then hold down Shift and click in last cell of area to be selected

Ctrl + Click – selects non-consecutive/non-adjacent cells/rows/columns

**Ctrl + A** – select all

Ctrl + Shift + End – selects all to the last active row/column – Click with mouse in first cell of area to be selected, then Ctrl/Shift/End

**Double click on cell** – opens Edit mode for cell

**When you select a cell both its row selector(numbers) and column selector(letters) display in Bold**

**Clicking on a row or column selector will select that entire row or column.**

**Using keystrokes is more accurate when selecting areas than dragging with mouse!**

## Entering Data

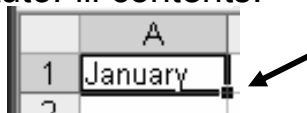
- Label – a text entry that contains at least 1 non-number character
- Value – numbers only
- Values align to the right of a cell
- Labels align to the left of a cell
- If an entry is longer than the defined width of a cell, it will “spill over” into the adjacent empty cell, or show only a portion of label if adjacent cell is not empty. However – it is only stored in one cell!
- Enter text or data – select cell, type info, click Enter. This will move you to the next cell.
- Clicking on the Green check will enter data but does not move to next cell


## Entering Dates

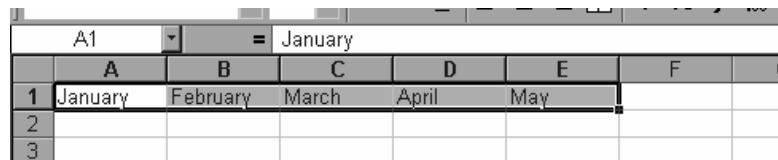
- Dates may be entered using text & numbers( January 1, 2000) or numbers only(01/01/2000)
- It is best to use 4 digit dates to avoid problems.
- To correct any entry – use backspace key if cell is still active, or click on cell and position cursor in Formula bar to make correction
- Double clicking in cell also opens the Edit Mode and places cursor in cell

## AutoFill Feature

- You can “autofill” cells for months of the year, days of the week and sums/formulas. Months & days can be full name or abbreviated.
- First type in the first field. In this example it is January
- You see that there is a dark black square at the RH corner .
  - This is the “fill handle” and will be used to “drag” to AutoFill contents.



- Rest your cursor over this corner until it becomes a solid + (not a  )
- Hold down the left mouse button and drag(across for column heading, down for row heading)
- Release at desired cell



The screenshot shows an Excel spreadsheet with the following data:

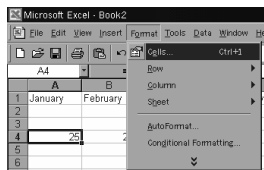
	A	B	C	D	E	F	G
1	January	February	March	April	May		
2							
3							

## Formatting Data

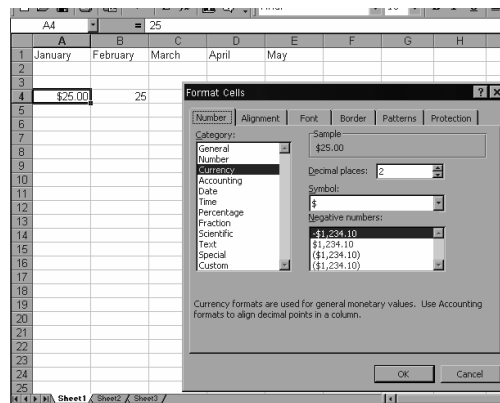
- Unless you include a date or special character (\$ % / , ) when entering numeric data, Excel displays in *General Format*.
- You can format individual cells or entire rows/columns
- You can use Format in the menu bar or icons in the toolbar.
- **Cells must be selected first to format!!**



- Format numbers to \$ value
  - Select cell or cells
  - Click Format in menu bar, Click Cells



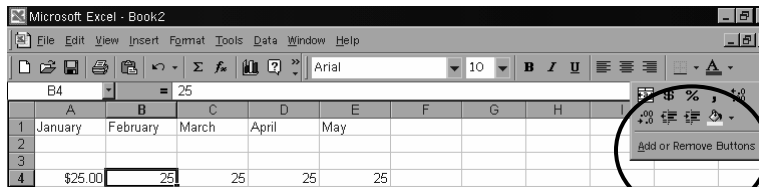
This will open the Format Cell dialog box – choose Currency, click OK



Follow the same instructions for %, fractions, etc)

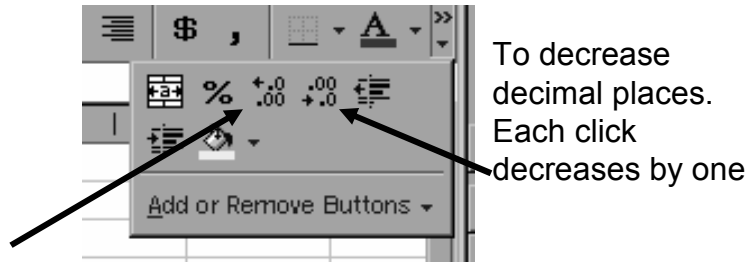
## Format using icons

- Select cells to format
- If \$ % , are not showing in toolbar, click on double arrow in formatting toolbar to show add'n buttons



Click on the symbol you need – this will immediately format the selected cell/cells and add the symbol selected to the toolbar. Choosing the , will add a decimal point, 2 places and comma in # as required

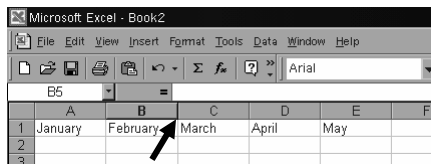
- To format for % - follow same instructions.
- % does not add decimal places. To add places, click on the double arrow at end of format toolbar (as in \$) and choose



To add decimal places. Each click adds one more place

## Adjust Columns/Rows

- When you rest your cursor between the row/column heading – it will become a 2 headed arrow

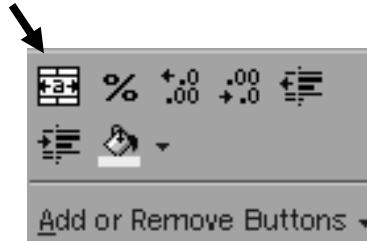


Double clicking here will activate AutoFit and resize column/row to needed size for data to fit in cell

You can still drag to resize, but this is not accurate.

## Merge & Center

- This is a feature you may want to use if you are putting a title on your worksheet and want to center it.
- When you type information in one cell and it spills over, this will merge it with the cell it “spilled over” in and center it.
- Type the data in one cell and click on the Merge & Center icon
- If icon not showing, click on double arrow at end of format toolbar and then click on
- You still edit from the one cell
- Undo using the undo button
  - There is no “Unmerge” icon



## Sorting Columns

- You can easily sort columns using the AZ and ZA icons in the toolbar
- AZ sorts ascending; ZA sorts descending
- Click on one cell of the column you want to sort, then click on the appropriate icon
- Excel sorts from left to right
- Remember that if you want to sort names, be sure to put first and last names in separate columns

- To sort rows based on the content of 2 or more columns:
- *For best results, the columns should have column labels*
- Click a cell in the list you want to sort
- Click on Data in the menu bar, click Sort
- Choose Header Row FIRST
- In the **Sort by** and **Then by** boxes, click the columns you want to sort
  - By choosing Header Row First, you will see the header names instead of A or B
- Select any other sort options, then click OK

## Formatting a Worksheet

- Cell alignment (left-justified, right-justified or centered)
  - Font, font style, size & color
  - Borders
- These choices are all accessed from Format in the menu bar, and click on Cells
- You can also “freeze panes” that allows you to lock columns & rows so you can still see your headings when you scroll a window
  - AutoFormat allows you to apply a preset look to your worksheet

**Remember to select the cells you want to format!**

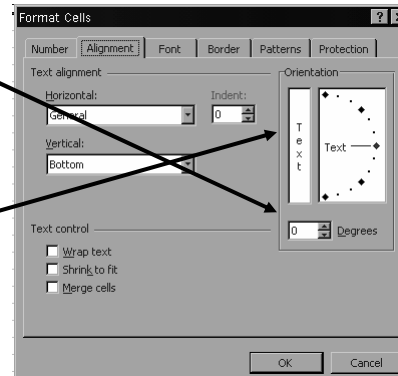
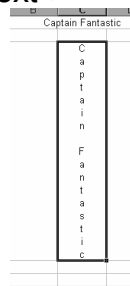
## Cell alignment

- Select the cell or cells, then click Format on menu bar, then click Cells, then click the Alignment tab

You can slant your text using the degrees

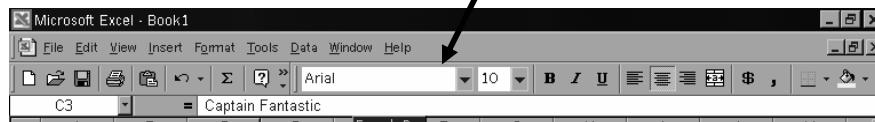


You can also align your text vertically by clicking here



## Formatting Text

- Select cell or cells to format, click on Format, then Cells, then Font tab.
- You can also make changes from Formatting toolbar

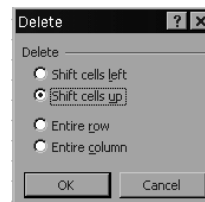


## AutoFormat

- With AutoFormat you can use a pre-designed template. It is not suited to complex worksheets, but works well with simple tables.
- Select the range you want to format (using Shift/Click)
- Click Format on the menu bar, then AutoFormat
- Choose a design and click OK

## Insert/Delete Rows/Columns

- You may need to insert blank rows/columns for spacing or entering additional data – or delete unnecessary data
- Select the cell immediately below or to the right where you want the row/column inserted
- Click Insert on the menu bar, then Row or Column as needed
- The row or column is inserted. Rows will be inserted above your selection. Columns inserted to the left of your selection
- To delete – select the cell or cells to be deleted
- Click on Edit in the menu bar, then Delete
- Choose Entire Row or Column
- Click OK



## Freezing Window Panes

- Click to select the cell that will be the “freeze point”
- Click on Window in the menu bar
- Click on Freeze Pane
- A black horizontal and vertical line will show your freeze point
- To unfreeze – click on Window, then Unfreeze Panes

## Formulas

- **Formulas always begin with =**
- To view the formula, click on the cell and the formula will be shown in the Formula Bar
- You can “build” your own formula – or – use AutoSum to total a range of cells
- You can “copy” a formula using the fill handle(used earlier on months & days)

## Building a formula

Symbols used for formulas:

^ Exponentiation

\* Multiplication

/ Division

+ Addition

- Subtraction

This is also the order that the operations are performed in regardless of the order of the formula

You can override this by using ( )

**Formulas are not case sensitive – lowercase letters are okay and may save you time!**

You can enter the formula in the cell or in the Formula Bar. Formulas read from left to right.

You need to use the cell location (C4) in the formula

Addition:    =C4+C5+C6 <enter>

Multiply:     =C4\*C5        <enter>

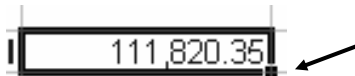
Subtract:     =C5-C4        <enter>

Divide:        =C5/C4       <enter>




## Copy a formula

- After you have created a formula – you can “copy” that formula using AutoFill
- Select the cell with the formula to copy
- Rest your pointer on the “fill handle” and hold down the left mouse button and drag to the last cell in the desired range
  - The “fill handle” is the small black square in the lower RH corner of the active cell



## AutoSum

- Using AutoSum is the quickest way to add adjacent columns or rows of numbers. AutoSum is a function.
- A Function contains a specific formula – in this case - addition
- Select the cell that will contain the total(it must be immediately to the right in a row and immediately below in a column.
- Double click the
- Your row or column is totaled
- **You should not have  blank cells in the row or column are totaling when using AutoSum.**
  - I suggest entering a 0 instead of leaving blank
  - Sometimes Excel will read the blank cells, other times it may require a 0

## Functions

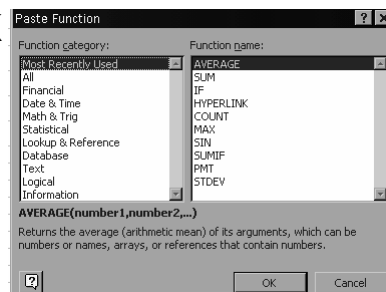
- A function is a predefined formula that performs a specific calculation. SUM is a formula that adds
- A function has 2 components – the function name (ie Sum) and an argument list in ( ) that contains the data
- For example: When the SUM function is used the formula does not list each cell added but uses :
- =B2+B3+B4+B5 vs =SUM(B2:B5)

## Functions con't.

- You can type a function into a worksheet just like a formula or use the formula palette.
- Click the cell to contain the function
- Click the *fx* icon to open Paste Function choices
- Choose a function, click OK

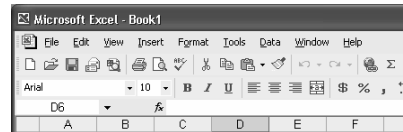
The most recently used will show first, scroll for other choices

This will open the Formula Palette window



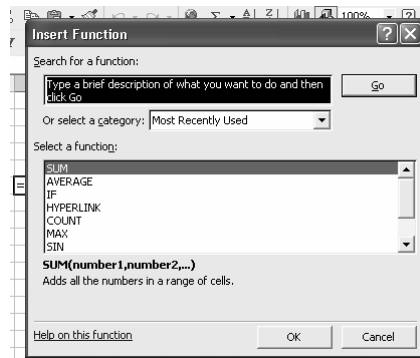
## Location of in Excel 2000 and XP

- In Excel 2000 the function icon is in the toolbar next to the AutoSum icon
- In Excel XP it is located at the formula bar
  - Just click on the icon to open the Insert Function window



## Insert Function window in XP

- You will see that this window is slightly different in appearance than the Paste Function window in 2000
- Once you select a function and click OK it will look like 2000



Function name

Change these values to desired cells if necessary

Use shift/click to select

Description of function

Results of formula

Clicking here will hide all but this line of the palette so you can see the worksheet to choose cells. Click again to open full palette.

	Fox Take-Out	22,198.40	22,635.00	25,953.36
	Total		=COUNT(B8:D14)	

## Page Layout

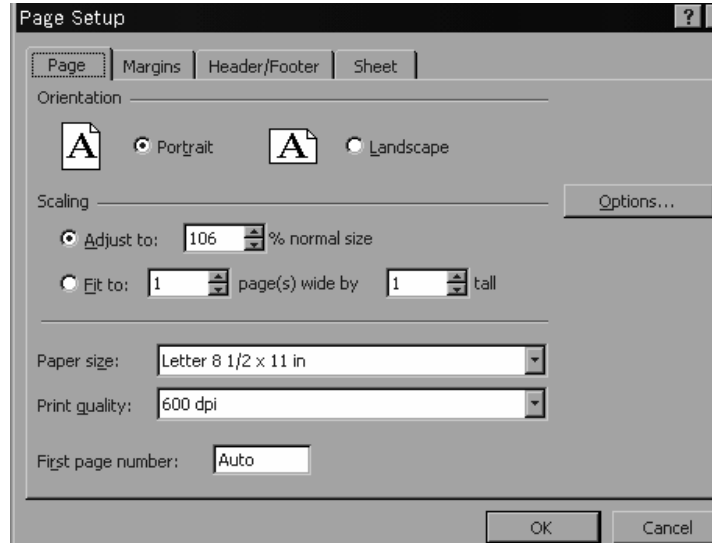
- From the Page Setup dialog box you can determine:

- Orientation (landscape or portrait)
- Scale to fit on 1 page
- Set margins(top, bottom, left, right)
- Center (horizontally or vertically or both)
- Add header or footer
- Print area – if you don't want the entire sheet
- Page order

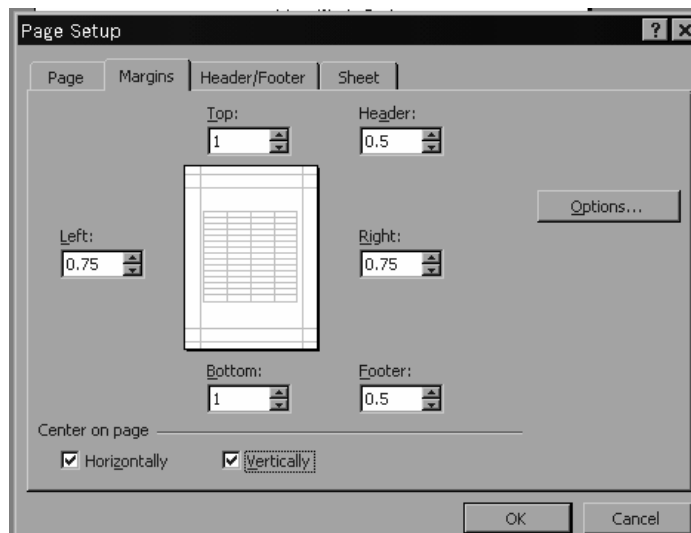
You can access from Print Preview, or File, Page Setup

If you access these from Print Preview, it gives you a chance to preview your changes immediately

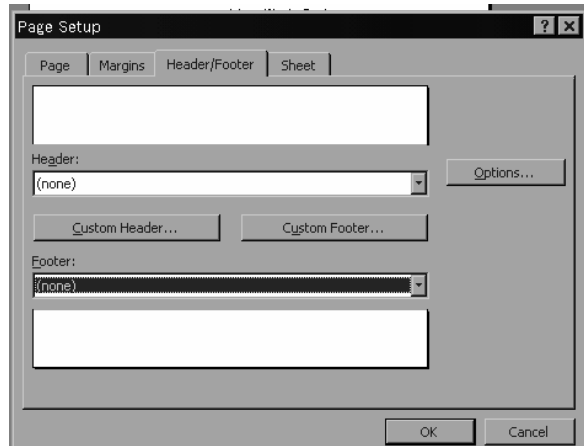
# Orientation/Scaling



# Margins

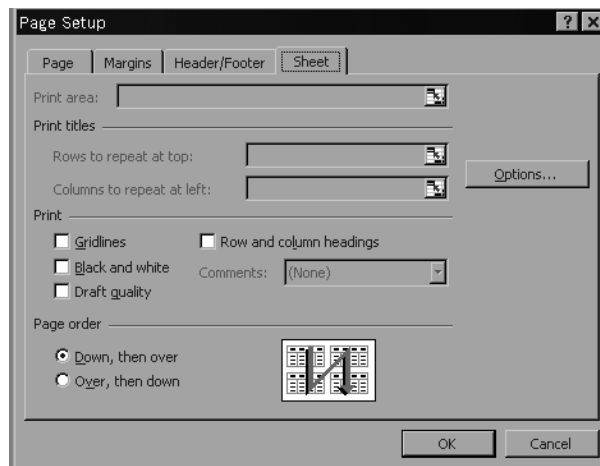


## Header/Footer



You can create custom info or use preset info

## Print Area



Excel defaults to consider a worksheets always starting with A1 – set print area to print only cells with information – otherwise worksheet will be centered and based on A1. You can clear Print Area – File, Print Area, Clear Print Area

## Setting Print Area

- To set up specific print areas
  - Select the cells to print
  - Click on File, Set Print Area.
  - You can also clear a print area from here
- You can print all worksheets in a workbook
- You can print selected worksheets
- You can print column labels(headers) on each page

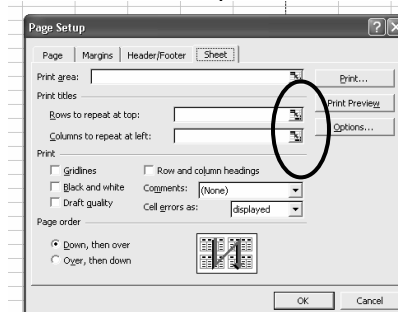
## Printing Worksheets

- Clicking on the print icon will only print the current worksheet – not all of them
- To print all sheets in a workbook – Right click on the sheet tab and click on Select All
- To print selected sheets(2 or more, but not all)hold down the Ctrl key and left click on each sheet tab you want to print

## Printing column/row labels on each page

- When printing several pages, it is a good idea to print the column labels on each page
- **Using Freeze Panes only works for viewing, not printing**
- Choosing Print Row & Column Headings from Sheet tab in Page Setup will only print the A,B,C,D and 1,2,3 headings!!
  - This is NOT what you want!

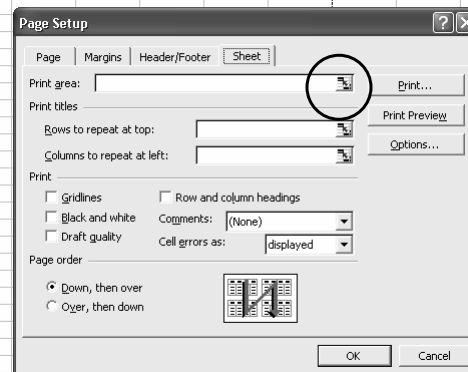
- Click on File, Page Setup, Sheet tab (you will see that the Print area windows are active)
- For column headers, click on the red arrow at **Columns to repeat at left**
  - Click the column you want printed on each page
  - Click the red arrow again to expand the menu
- For row headers, click on the red arrow at **Rows to repeat at top**
  - Click the row with the information you want on each printed page
  - Click the red arrow again to expand the window





## Print Area

- You can select the area you want to print
  - This allows you to print only a portion of a worksheet
- File, Page Setup, Sheet tab
- Click on the red arrow to collapse the Page Setup window
  - This will allow you to see your spreadsheet and select the area you want to print
- Click the red arrow again to expand the window
- Your print area range will show in the window
- You can also set the print area by entering the first cell with info and the last cell with info – separated by a colon :
  - A1:H10
- A dotted line will mark the print area



## Printing gridlines

- You can quickly print gridlines on your worksheet without having to go to Format, Cells, Borders
- File, Page Setup, Sheet
- Click Gridlines to put a check in the box

