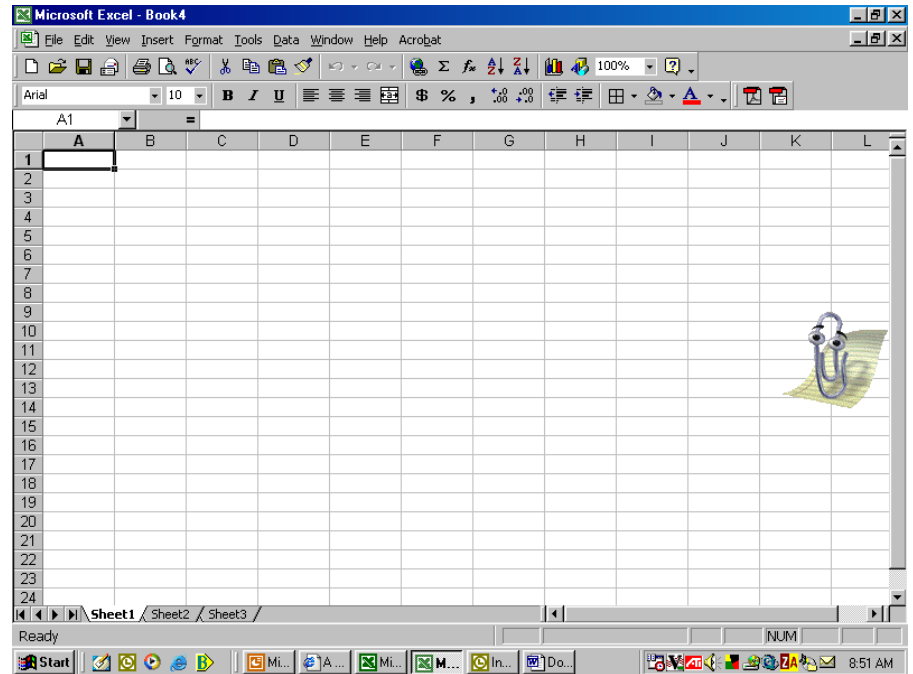


# Microsoft Excel 2003

Project 1  
An Introduction

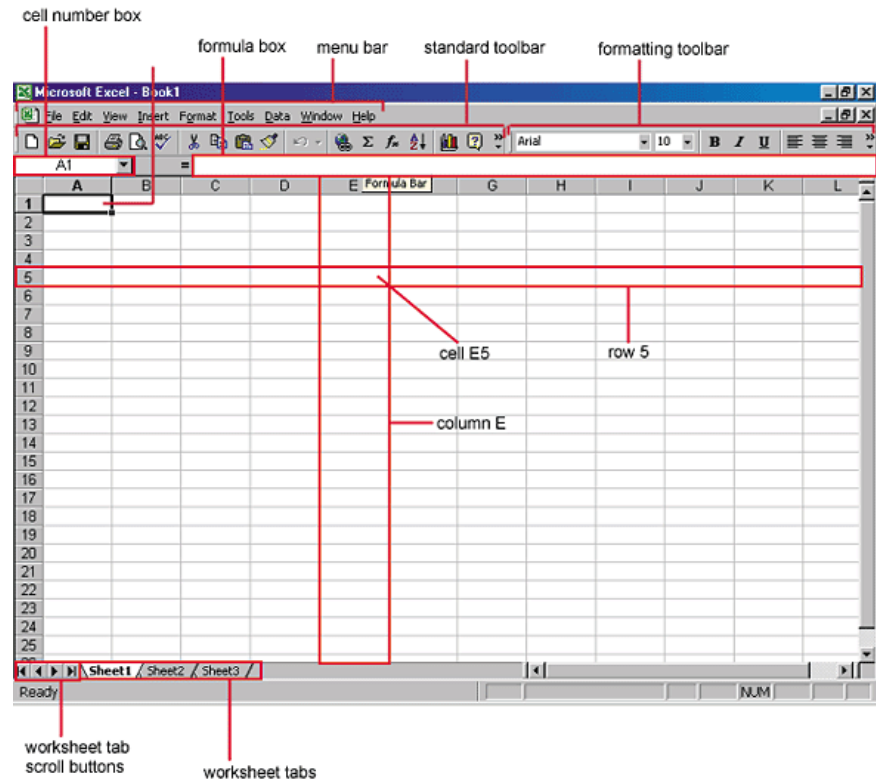
# What is Excel

- Excel allows you to create spreadsheets much like paper ledgers that can perform automatic calculations.



# Screen Elements

- A file is a **workbook** made up of **worksheets**
  - **Labels** - The letters and numbers of the columns and rows
  - **Cell** - The intersection of a column and a row
    - Cells can contain either text, numbers, or mathematical formulas.



# The Standard Toolbar



1. **Open** - Click **File|Open** from the menu bar, press **CTRL+O**, or click the **Open** folder button to open an existing workbook.
2. **Save** - The first time you save a workbook, select **File|Save As** and name the file. After the file is named click **File|Save**, **CTRL+S**, or the **Save** button on the standard toolbar.
3. **Print** - Click the **Print** button to print the worksheet.
4. **Print Preview** - This feature will allow you to preview the worksheet before it prints.
5. **Spell Check** - Use the spell checker to correct spelling errors on the worksheet.

# Adding Worksheets, Rows and Columns

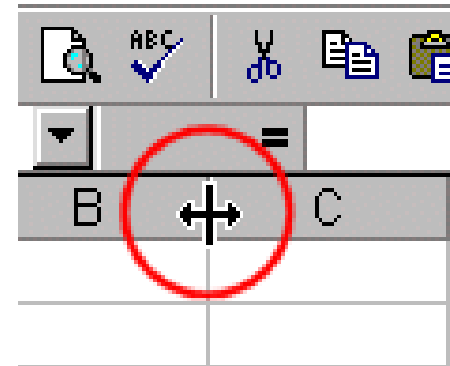
- **Worksheets** - Add a worksheet to a workbook by selecting **Insert|Worksheet** from the menu bar.
- **Row** - To add a row to a worksheet, select **Insert|Rows** from the menu bar, or highlight the row by clicking on the row label, right-click with the mouse, and choose **Insert**.
- **Column** - Add a column by selecting **Insert|Columns** from the menu bar, or highlight the column by click on the column label, right-click with the mouse, and choose **Insert**.

# Moving Through the Cells

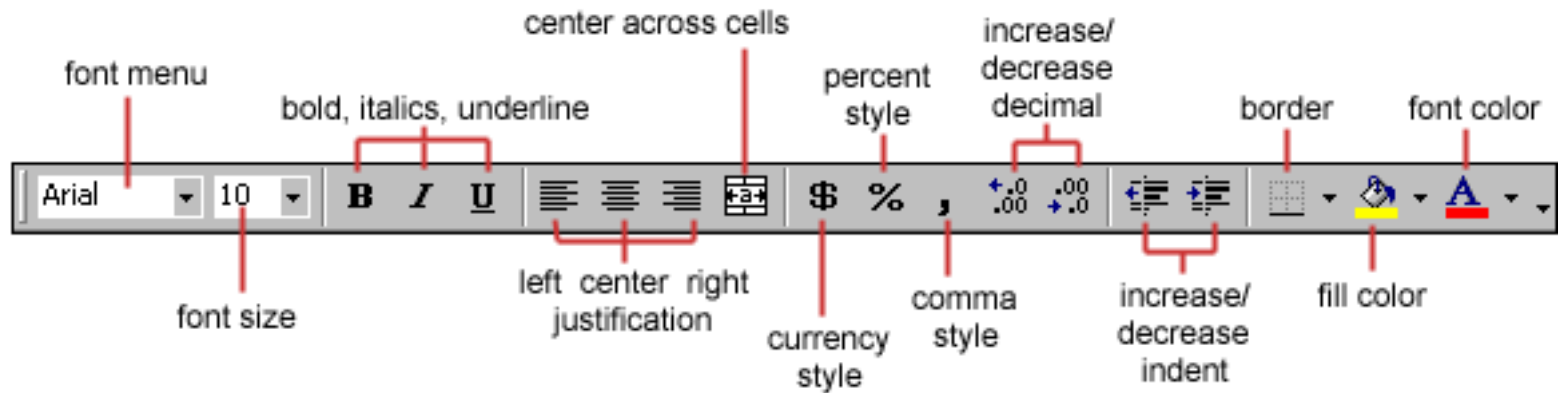
<b>Movement</b>	<b>Keystroke</b>
One cell up	Up arrow key
One cell down	Down arrow key or ENTER
One cell left	Left arrow key
One cell right	Right arrow key or TAB
Top of worksheet (cell A1)	CTRL + HOME
End of worksheet (last cell containing data)	CTRL + END
End of row	CTRL + right arrow
End of column	CTRL + down arrow
Any cell	CTRL + G

# Resizing Rows and Columns

- **Resize a row** by dragging the line below the label of the row you would like to resize.
- **Resize a column** in a similar manner by dragging the line to the right of the label corresponding to the column you want to resize.
- You can also double click this line. This action is termed **Best Fit**.



# Formatting Toolbar



**Format Cells Dialog Box** - right-click on the highlighted cells and choose **Format Cells** from the shortcut menu or select **Format|Cells** from the menu bar

# Distinguishing feature

- Allows you to create mathematical formulas and execute functions

**Large table for displaying text.**

# Questions



# Microsoft Excel 2003

**Project 2**

**Formulas and Functions**

# How did they do that?

<b>Final Grades</b>							
		Daily Points	Exam Points	Project Points	Performance Points	Final Grade 1st Semester	Letter Grade
Last Name	First Name						
Clinton	Mike	86%	89%	90%	94%	90%	B
Dean	Kerri	17%	0%	0%	0%	4%	F
Johnson	Jim	99%	84%	86%	90%	90%	B
Kasherry	Brandon	74%	71%	27%	70%	60%	F
King	Marcy	80%	68%	79%	86%	78%	C-
Mitchell	Harry	77%	82%	94%	93%	87%	B-
Thomas	Todd	94%	97%	96%	94%	95%	A
Tolbert	Tlyer	79%	47%	55%	58%	60%	F
Winger	Courtney	93%	84%	92%	98%	92%	B+

# What are formulas and functions?

- **Formula** - entries that have an equation that calculates the value to display.
  - Must begin with the = sign
  - Are used to CALCULATE a value.
  - Are considered mathematical equations.
- **Functions** – are prewritten formulas.
  - AVERAGE, MAX, MIN

# Entering Formulas....

- Reference information.
  - Don't have to type it again.
  - Don't have to change the equation.

	A	B	
1	Hours	23	
2	Wage per hour	\$ 5.36	
3			
4	Total Pay	\$ 123.28	
5			
6			

$$= B1 * B2$$

$$= 23 * 5.36$$

**Reference as much data as possible.**

# Change in Formulas.....

	A	B
1	Hours	34
2	Wage per hour	\$ 5.36
3		
4	Total Pay	\$ 182.24

- total pay would now be =  $34 * 5.36$
- but would still be =  $B1 * B2$

**Reference as much data as possible.**

# Basic Math Functions

Please **E**xcuse **M**y **D**ear **A**unt **S**ally.

ARITHMETIC OPERATOR	MEANING	EXAMPLE OF USAGE	MEANING
( )	Parentheses	= $(10-5)+4$	Will subtract 5 from 10 then add 4
^	Exponentiation	= $2^3$	Raises 2 to the third power, in this example the answer is 8
*	Multiplication	= $6.1 * A1$	Multiplies the contents of cell A1 by 6.1
/	Division	= $H3 / H5$	Divides the contents of cell H3 by the contents of cell H5
+	Addition	= $4 + 8$	Adds 4 and 8
-	Subtraction	= $D34 - D35$	Subtracts D35 from the contents of D34

# Basic Math Functions

A1 (column A, row 1) = 5

A2 (column A, row 2) = 7

A3 (column A, row 3) = 8

B1 (column B, row 1) = 3

B2 (column B, row 2) = 4

B3 (column B, row 3) = 6

	A	B
1	5	3
2	7	4
3	8	6

Operation	Symbol	Constant Data	Referenced Data	Answer
<b>Multiplication</b>	*	= 5 * 6	= A1 * B3	30
<b>Division</b>	/	= 8 / 4	= A3 / B2	2
<b>Addition</b>	+	= 4 + 7	= B2 + A2	11
<b>Subtraction</b>	-	= 8 - 3	= A3 - B1	5

# SUM Function

=SUM(first value:last value)

=SUM(A1:A4)

- Most common used.
- Blank cells will return a value of zero to be added to the total.
- Text cells can not be added to a number and will produce an error.

# AVERAGE Function

`=AVERAGE(first value:last value)`

`=AVERAGE(A1:A4)`

- Simplifies adding all of the indicated cells together and dividing by the total number of cells.
- Text fields and blank entries are not included in the calculations of the Average Function.

# MAX Function

=MAX(first value:last value)

=MAX(A1:A4)

- This will return the largest (max) value in the selected range of cells
- Blank entries and text entries are not included in the calculations of the Max Function.

# MIN Function

`=MIN(first value:last value)`

`=MIN(A1:A4)`

- This will return the smallest (Min) value in the selected range of cells.
- Blank entries and text entries are not included in the calculations of the Min Function.

# COUNT Function

=COUNT(first value:last value)

=COUNT(A1:A4)

- This will return the number of entries (actually counts each cell that contains number data) in the selected range of cells.
- Blank entries are not counted.
- Text entries are NOT counted.