

Excel – Level 1

Computer Training Solutions



1. Excel Basics

- ✦ The Excel Program
 - ✦ Workbook Environment
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2. Entering Data and Navigating in a Worksheet

- ✦ Enter and Correct Data
 - ✦ Save a File
 - ✦ Use Formulas
 - ✦ Open a Second File
 - ✦ Navigation and Movement Techniques
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3. Modifying a Workbook

- ✦ Work with Ranges
 - ✦ Work with Functions
 - ✦ Edit Cell Contents
-

4. Moving and Copying Data

- ✦ Insert Rows and Ranges
 - ✦ Move Data
 - ✦ Copy Data
 - ✦ Merge Cells
 - ✦ Absolute References
 - ✦ Fill Series Feature
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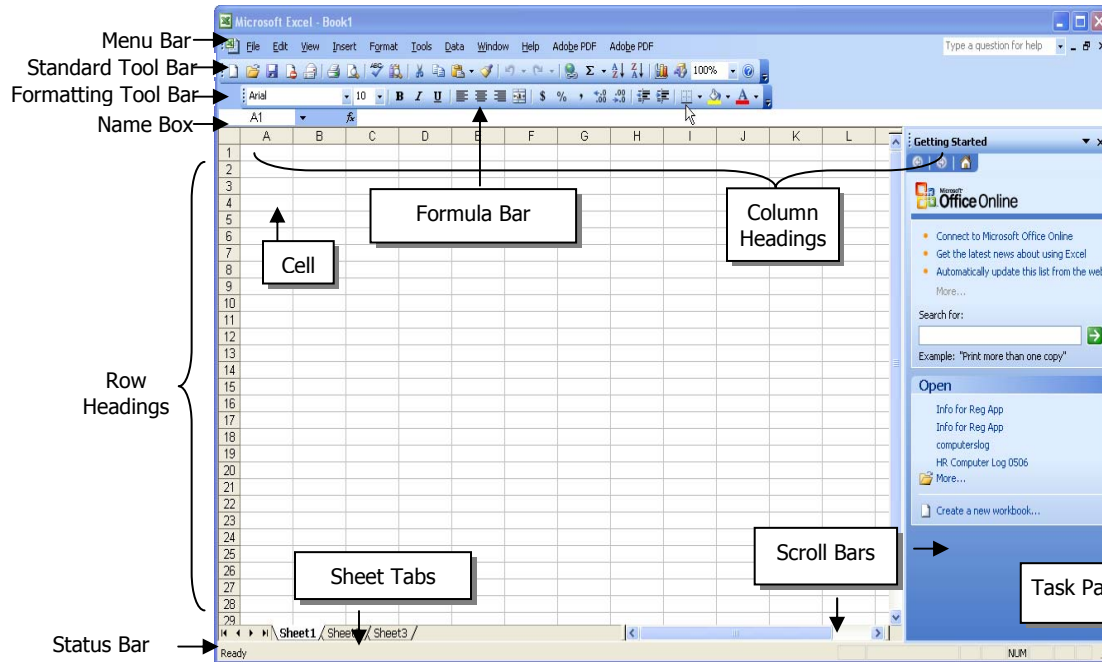
5. Formatting a Worksheet

- ✦ Format a Worksheet
 - ✦ Number Formats and Text Alignment
 - ✦ Copy and Paste Formats
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6. Printing a Worksheet

- ✦ Check Spelling
- ✦ Use the Print Preview Command
- ✦ Print a Large Worksheet
- ✦ Additional Print Options

Excel Application Window



Excel Facts

- Column headings are designated letters A – IV for a total of 256 columns.
- Row headings are designated numbers from 1 to 65, 536.
- The intersection of a column and a row is called a cell.
- Cells store data entered into a spreadsheet.
- One worksheet has 16,777,216 cells.
- By default, a workbook contains 3 worksheets.
- You can have up to 255 separate worksheets in a workbook.

General Keyboard Shortcuts

New workbook	Ctrl + N
Open a workbook	Ctrl + O
Save a workbook	Ctrl + S
Close all workbooks	Shift + File/Close All
Undo	Ctrl + Z
Redo	Ctrl + Y
Repeat last function	F4
Cancel	Esc
Help	F1
New chart	F11
Show formulas in cells	Ctrl + ~ (Tilde)

Navigation & Editing Shortcuts

Go to cell A1	Ctrl + Home
Beginning of row	Home
To the last cell with data	Ctrl + End
To go to a specific cell	F5 or Ctrl + G
One cell left, right, up, down	Arrow keys
Scroll down one screen	Page Down
Scroll up one screen	Page Up
Screen left	Alt + Page Down
Screen right	Alt + Page Up
Edit active cell	F2
Absolute Reference	F4
Cut	Ctrl + X
Copy	Ctrl + C
Paste	Ctrl + V
Select all	Ctrl + A
Format selected cell(s)	Ctrl + 1

Mouse Shapes



When you point in the middle of a cell, the mouse pointer looks like a thick cross, it can be used to select a single cell or a block of cells for editing purposes.



The "11 O'Clock" arrow pointer allows you to move the selected cell(s) to another location on the worksheet by dragging or copies the cell by holding the CTRL key in conjunction with the click and drag.



The thin cross-hair shaped mouse is used with the fill/copy handle at the bottom right corner of the cell. You can fill in a series or copy the cell contents to adjacent cells.

Formulas

To create a basic formula:

1. Select the cell in which you would like the formula to appear.
2. In the formula bar, type an equal sign, and then type the formula you would like to perform.
3. Press enter.

Symbols used to calculate: add (+), subtract (-), multiply (*), divide (/),

Built-in Functions

Function	Description
=SUM(C1:C9)	Adds the contents of the range
=AVERAGE(C1:C9)	Calculates the average
=MAX(C1:C9)	Returns the highest value
=MIN(C1:C9)	Returns the lowest value
=COUNT(C1:C9)	Counts the number of values in a range
=COUNTA(C1:C9)	Counts the number of non-blank cells in a range
=COUNTIF(C1:C9,10)	Counts the number of 10's in the selected range
=NOW()	Returns the current date

Open a Workbook

1. Click the **Open** button on the Standard Toolbar
2. Select the drive/folder, double click the filename



Navigate in a Workbook

- Use the arrow keys or click the mouse
- **Ctrl + Home** to go to the beginning of the worksheet
- **Ctrl + End** to go to the end of the worksheet
- Page Up key to move one screen up
- Page Down key to move screen down
- F5, type the cell address, **OK** or enter

Save a Workbook

- To update and replace a file, click the **Save** button on the Standard Toolbar



Save with a New Name

- Choose **File → Save As**
- Select the location in the Save in box
- Type the filename, click **Save**

Close a Workbook

- Click on the document close window button (X near the top right corner)



Close Excel

- Click on the program close button (X in the top right corner)



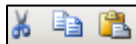
Create a New Workbook

- Click on the **New** button on the Standard Toolbar



Cut, Copy, Paste

1. Select the cell(s) and click the **Cut** or **Copy** button on the Standard Toolbar
2. Select the desired location and click the **Paste** button on the Standard Toolbar



- OR -
1. Select the cell(s) and right-click on selection and choose **Cut** or **Copy**
 2. Select the desired location and right-click and choose **Paste**
- OR -

1. To cut cells using the drag and drop method, select the cell(s), point to the border around the cells, press and hold the left mouse button and drag the cells to the new location
2. To copy cells using the drag and drop method, select the cell(s), point to the border around the cells, hold down the left mouse button, press the **Ctrl** key and drag the cells to the desired location

Use AutoFill to Fill Series

- Select the cell that contains the starting value of the series, click and drag the fill handle to the ending cell of the series.

Edit Cell Data

- Double-click in the cell to be edited, make changes and press **Enter**

Undo/Redo

- Click **Undo** button on the Standard Toolbar to



undo one operation at a time (maximum 16)

- Click **Redo** button on the Standard Toolbar to redo one operation at a time

Delete cell contents

- Select the cell(s) and press **Delete** key on keyboard

Insert Row, Column, Cell(s)

- Select row(s) heading at the position for the new row(s), right-click and choose **Insert**
- Select column(s) heading at the position for the new column, right-click and choose **Insert**
- Select cell(s) at the position for the new cell(s), right-click, choose **Insert**, and Shift cells right or down

Delete Row, Column, Cell(s)

- To delete row(s), right click row heading and choose **Delete**
- To delete columns, right click column heading and choose **Delete**
- To delete cells, right click selected cells and choose **Delete**, and Shift cells left or up

Select Cells

- Click and hold down left mouse button as you drag over any amount of cells - OR -
- Click on first cell to be selected, and then hold down the **Shift** key and click on the last cell in the selection
- To select an entire column, click on the column heading
- To select an entire row, click on the row heading

Find, Replace and Go To Cell Data

- To find data, choose **Edit → Find**, enter the desired text and choose **Find Next**.
- To replace data, choose **Edit → Replace**, enter the desired text to find/replace in the Find What and Replace With boxes and choose **Replace All** or **Find Next, Replace**
- To go to a specific cell, choose **Edit → Go To**, type in the cell reference.

Spell Check

- Click the **Spelling** button on the Standard Toolbar



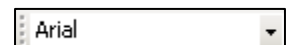
Formulas

- To total a column/row, select the answer cell, press **AutoSum**, then press enter
- To build a formula or function, select the answer cell, type = A1*A2, press Enter, or =AVERAGE(B4:B9), press Enter
- To copy a formula/function, drag the **AutoFill** handle (bottom-right of cell)
- To create an absolute reference, use \$A\$1 (or press **F4**)



Font

- Select the cell(s), click the drop-down arrow on the Formatting Toolbar to select the desired Font



Font Size

- Select the cell(s), click the arrow for Font size on the Formatting Toolbar and choose the font size



Format Text

- Select the cell(s), click the **Bold**, **Italic** and/or **Underline** buttons on the Formatting



Alignment

- Select the cell(s), click the left, centre, or right alignment buttons on the Formatting Toolbar
- To centre text across columns, select the cells, click the **Merge and Centre** button on the Formatting Toolbar
- To change vertical alignment, select the cell(s), choose **Format, Cells, Alignment**, set the Orientation, **OK**



Borders

- Select the cell(s), click the drop-down arrow of the Borders button, choose the desired border



Fill Color/Shading

- Select the cell(s), click the drop-down arrow of the Fill Color button, choose the desired color/shading



Font Color

- Select the cell(s), click the drop-down arrow of the Font Color button, choose the desired color



Apply Number Formats

- Select the cell(s), right-click and choose **Format Cells**, select **Number** from the Category and choose the desired number format, click **OK**

Adjust Column Width or Row Heights

- To adjust the column width, drag the column heading border beside the column letter or double click the column heading border for AutoFit to fit the widest entry in the column
- To adjust the row height, drag the row heading border below the row number or double click the row heading border for AutoFit to fit the tallest entry in the row

Format Worksheet Tabs

- Right-click the sheet tab and choose **Rename**, type in the new name and press **Enter** or double-click the sheet tab and type in the new name and press **Enter**.

Reposition Sheet Tabs

1. Click and hold the sheet tab and drag it to its new position.
2. To select nonadjacent or overlapping controls, hold down the SHIFT key and click each control that you want to select.

Insert and Delete Worksheets

- To insert a worksheet, select an existing worksheet tab, right-click and choose Insert.
- To delete a worksheet, select the worksheet tab, right-click and choose Delete. (Note: If you delete a worksheet, you cannot undo).

Copy and Paste Worksheets

- Select the worksheet you want to copy, right-click and choose **Move** or **Copy**.
3. Select which workbook you want to copy the worksheet to.
 4. Check the **Create A Copy** check box.
 5. Select which sheet you want the copied worksheet pasted in front of.
 6. Click **OK**.

Set a Print Title

- Choose **File** → **Page Setup**, click the Sheet tab
7. In the Rows to Repeat At Top, type in the rows or range of cells to repeat.

Print Preview

- Click the Print Preview button on the Standard Toolbar and click zoom in or zoom out
- Click **Next** or **Previous** to move to next or previous pages
- Click **Setup** to change print options such as margins, paper size, orientation, scaling, headers/footers, print titles, grid lines, sheet options
- Click **Margins** to show margin lines
- Click **Close** to close Print Preview



Insert and Remove Page Breaks

- To insert a page break, select the row or column that will be the first row or column on the new page and choose **Insert** → **Page Break**.
- To remove a page break, select the column immediately to the right of the page break or the row immediately below the page break and choose **Insert** → **Remove Page Break**.

Print

- Click the **Print** button on the Standard Toolbar to print the entire worksheet or choose **File** → **Print** for printing options.



Freeze, Unfreeze Rows and Columns

- Choose **Window** → **Freeze Panes**.
- To unfreeze, choose **Windows** → **Unfreeze**.

Exercise 1 – Creating a Worksheet

1. Create a new workbook.
2. Enter all of the text shown below:

	A	B	C
1	Budget		
2			
3		Jan	Feb
4	Rent	600	600
5	Utilities	150	175
6	Car	190	190
7			
8	Total		
9			

3. Enter formulas in cells B8 and C8 to calculate totals for January and February.
4. Save the file as **My Budget** and close the file.

Exercise 2 – Using Formulas

1. Open **Practice – Regional Data**.
2. In cell F6, enter a formula containing a function to sum the Rochester data. Create similar formulas in cells F7, F8 and F9 for the data from each of the remaining locations.
3. In cell B11, use a function to average the QTR1 data. Create similar formulas in cells C11, D11, and E11 for each remaining quarters.
4. Edit the heading BNL Corporation to read BNL Corporation, Inc.
5. Save the file as **My Practice – Regional Data** and close the file.

	A	B	C	D	E	F
1		BNL Corporation				
2		Regional Sales Data				
3		(Current Year)				
4						
5		QTR1	QTR2	QTR3	QTR4	YR TOTALS
6	Rochester	12365	26598	10236	20365	69564
7	Boston	14563	13256	25463	10236	63518
8	Chicago	26543	12879	13659	20459	73540
9	Seattle	24569	20365	10326	15698	70958
10						
11	Averages:	19510	18274.5	14921	16689.5	

Exercise 3 – Working with Functions

1. Open the **Practice - Calculations** workbook.

	A	B	C	D	E
1		Pointer Books & Music			
2		Book Sales - Fiction			
3		FY 1996			
4					
5		Category	Actual Sales	Projected Sales	Revenue
6		Children	2,769,521	2,668,594	
7		General	3,156,489	3,166,498	
8		Mystery	2,648,957	2,536,945	
9		Science Fiction	7,362,419	6,955,081	
10		Total			
11					
12					

2. Create a formula to calculate the Revenue (Hint: Actual Sales minus Projected Sales) in cells **D6** through **D9**.
3. Create a formula to calculate the Total Actual Sales and Total Projected Sales in cells **B10** and **C10**.
4. In cell **A12**, type Average.
5. In cell **B12**, create a formula to calculate the average Actual sales.
6. In cell **A14**, type Maximum.
7. In cell **B14**, create a formula to calculate the maximum Actual sales.
8. Save the workbook as **My Calculations**.
9. Close the workbook.

Exercise 4 – Formatting

1. Open the file **Practice - PBM Revenue**.
2. Delete row **3**.
3. Add a blank row between rows **8** and **9**.
4. Make the following formatting changes listed below:
 - Bold the titles in rows **1** and **2**
 - Bold the column headings in rows **7** and **8**
 - Add a border under the column headings
 - Increase the font size for the title **Pointer Books and Music** by two points
 - Italicize the row headings in cells **A10:A12**
 - Increase the row height of row **13** to **18** point.
5. Use Autofill to extend the columns of years to the year 2000 (ends in column H).
6. Use Autofill to copy the word **Projected** and the border to the new columns.
7. Change the widths of Columns **B** through **H** to **12** point.
8. Centre the titles in rows **1** and **2** between columns **A** to **H**.
9. Create a formula in cell **D10** that calculates an increase over 1995 sales by 112%. (**Hint:** Refer to the percentage in cell B4 - use absolute references).
10. Copy the revenue increase formula from D10 to the range including **D10:H12**.
11. Create a formula in cells **B13** to **H13** to total the Revenue.
12. Format all numbers in cells **B10** to **H13** to Currency, no decimals.
13. Bold cells **A13** to **H13**, add a **Top and Thick Bottom** border to the cells and a shading color of your choice.
14. Save the file as **My Revenue** and close it.