Coverage Plan

Lecture 10

10.1 Snap Shot

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10.1 Snap Shot

In this Lecture you will learn about working with work sheets, Ranges and Formulas.

10.2 Working with Worksheets

The basic building block of Excel is the worksheet – a two dimensional grid whose rows and columns define individual cells. Within each cell you can enter numbers , text, date and time information , or references to other cells. Most importantly, cells can contain mathematical and logical formulas that calculate and display results based on data you enter. Formulas in a worksheet can draw from Excel's enormous library of build-in function to perform everything from elementary arithmetic to sophisticated number-crunching, including statistical and financial analysis. To visually explain the relationship between numbers, you can also display data in an Excel worksheet as a chart.

A well-designed worksheet can be as simple as a list of names or checkbook transactions, or as complex as the financial model for a major multinational corporation. In either case, you begin with a blank sheet.

When you start Excel by using its shortcut on the Start menu, the program automatically opens a new, blank Excel workbook with the temporary name Book 1. To create another new workbook , click the New button, or use the keyboard shortcut Ctrl + N .Each new workbook gets a similar generic name Book2 , Book3 , and so on.

When you save a worksheet , you actually save it in an Excel workbook, which can hold multiple worksheets. By default, each new Excel workbook starts out with three blank worksheets; you can add new worksheets, delete an existing one, and rename or rearrange worksheets to suit your needs.

An index tab at the bottom of each worksheet identifies the sheet by name. When you open a new workbook , each sheet has a generic name: Sheet1, Sheet2, Sheet3 , and so on.

10.3 Working with Ranges

A range is any combination of cells that you select, generally so that you can enter data or include the cells in a command or formula. In a broader sense, whenever you move about in the workbook, you are selecting a range, because the cell or range on which you stop is the selected, or active, cell. n Excel, you can work with two types of ranges:

Single Sheet or 2-D

A group of adjacent cells that are contiguous (within a rectangle) in a single worksheet, such as B5:D25. This is the type of range you work with most frequently.

Multi Sheet or 3-D

A range that spans multiple sheets, usually contiguous, in the workbook so that the same 2-D range is referenced on each sheet. For example , you could define a range on Sheet1 to Sheet 4 , which includes the cells in A5:F15 on each sheet . You refer to that range as Sheet1:Sheet4!A5:F15 You can also work with a non contiguous range, which consists of multiple ranges.

Selecting a Single-Sheet Range

Watch the Name box when selecting a range of cells; it displays the number of rows and columns a small window near the mouse pointer displays the number of rows or columns you are selecting . You will also find that the row and column headings for a selected range take on the appearance of pressed buttons, which helps to define the extent of the range.

You can select a single-sheet(2D) range in several ways.

- Click a corner cell of the range and then Shift+Click the diagonally opposite corner.
- Click and drag over the range from corner to corner with your mouse
- Choose Edit then press Go To (Press F5 or Ctrl+G) , and enter the range you want to select in the Go To dialog box.

- Select one corner of the range, hold down Shift, and then use the arrow keys to select the rest of the range.
- Click once within a column or a row heading to select an entire row column.
- Click and drag over the headings or use Shift+Click to select a range of rows or columns
- To select data in a single column or row, select one cell at the top or bottom of the data. Then hold down Shift and double-click one side of the active cell to select all contiguous cells in that direction. With the keyboard, press Ctr+Shift and an arrow key to select the contiguous cells in that direction .

Selecting a Multi-Sheet Range

On occasion you might want to select a range that includes more than one sheet, for example, to include in a report. To select a multi sheet (3D) range on contiguous sheets, first select the 2-D range on the first worksheet of the range, such as A5:F15 .Then hold down Shift and click the Sheet tab for the last sheet of the range, such as Sheet3

References make Formula

The true power of Excel 2000 shows when you use cell addresses and range names in formulas. All the following are valid formulas. Cell addresses or range names appears throughout the formulas.

=(Sales Totals) / Num Of Sales
=C4 * 2 –(Rate * .08)
=7+LE51 –(Gross – Net)

When you enter formulas that contains range addresses, you can either type the full address or point to the cell address. If you want to include a complete named range in a formula , select the entire range and Excel 200 inserts the range name in your formula. Often , finding and pointing to a value is easier than locating the address and entering the exact address.

If , for example, you are entering a formula for cells that are close to formula's cell, when you get to the place in the formula that requires a close cell, don't type the cell address ; instead , point to the cell . If you have entered a formula such as =7 + , instead of typing a cell address of LE51, address for you. Immediately after typing the cell address for you . Immediately after typing the