Presented By
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MS Excel 2007

SPREAD SHEET

Spread sheet consists of rows and column, in which any data can be entered.

An Electronic spread sheet is an application software package that lets one enter data values, calculate, manipulate and analyze set of data. It helps in organizing, calculating, analyzing it and producing the desired result.

VisiCalc, was the first computer spread sheet program released in 1979 for Apple II computers developed by Dan Bricklin and Bob Frankston.

Collection of rows and column are known as worksheet and collection of worksheet are know as workbook. By default a workbook consists three worksheets named sheet1, sheet2 and sheet3. each sheet contains 256 columns and 65536 rows in MS-Excel 2003 and previous versions. In MS-Excel 2007 the number of columns are 16384 and more than 1 million rows.

APPLICATIONS OF SPREAD SHEET

- Financial Modeling
- Scientific
- Engineering
- Graphics presentation
- Database Front End
- Custom Application
- Forecasting and trend analysis
- Production scheduling
- Management Decision Support
- Annual reports
- Inventory Management
- Payrolls

Spread sheet software for different platforms

- MS-Excel for Windows
- Number in Apple
- Mariner Calc for MAC
- Ispread for ipad and Iphone
- Calligra (KCalc) sheets for Calligra office suite
- Zcubes for webbased
- Kingsoft Office is an office suite for MS-windows, Linux and Andriod
- Accel Spread sheet for All Windows

Comparison between 2003 and 2007

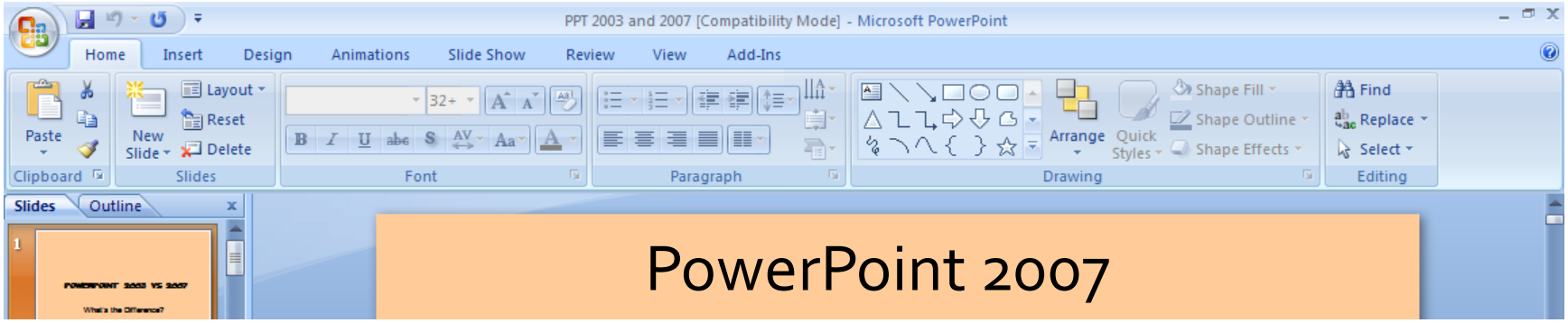
MS-EXCEL 2003

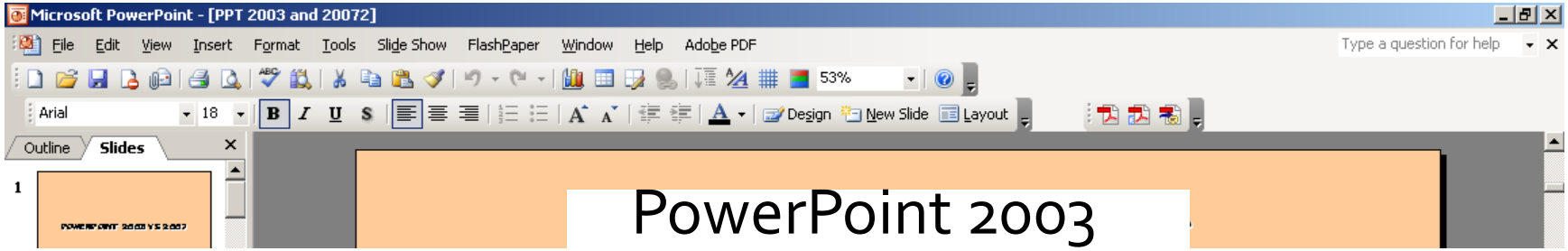
- Menu Driven
- Standard tool bar
- Formatting tool bar
- Formula bar
- Drawing tool bar

MS-EXCEL 2007

- Ribbon Driven
- Quick access tool bar
- Office button
- Tab
- Group
- Dialog box launcher
- Formula bar

New presentation Page- 2003 and 2007

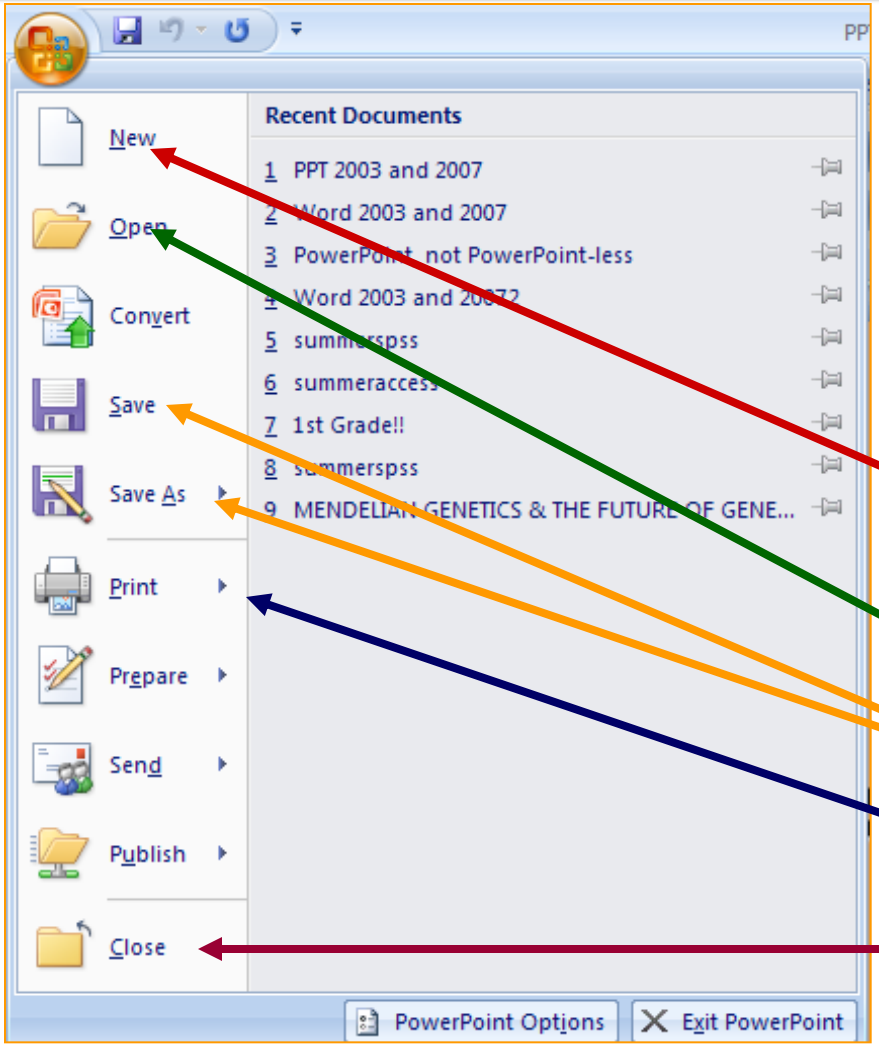




Advance Screen element of MS-Excel 2007

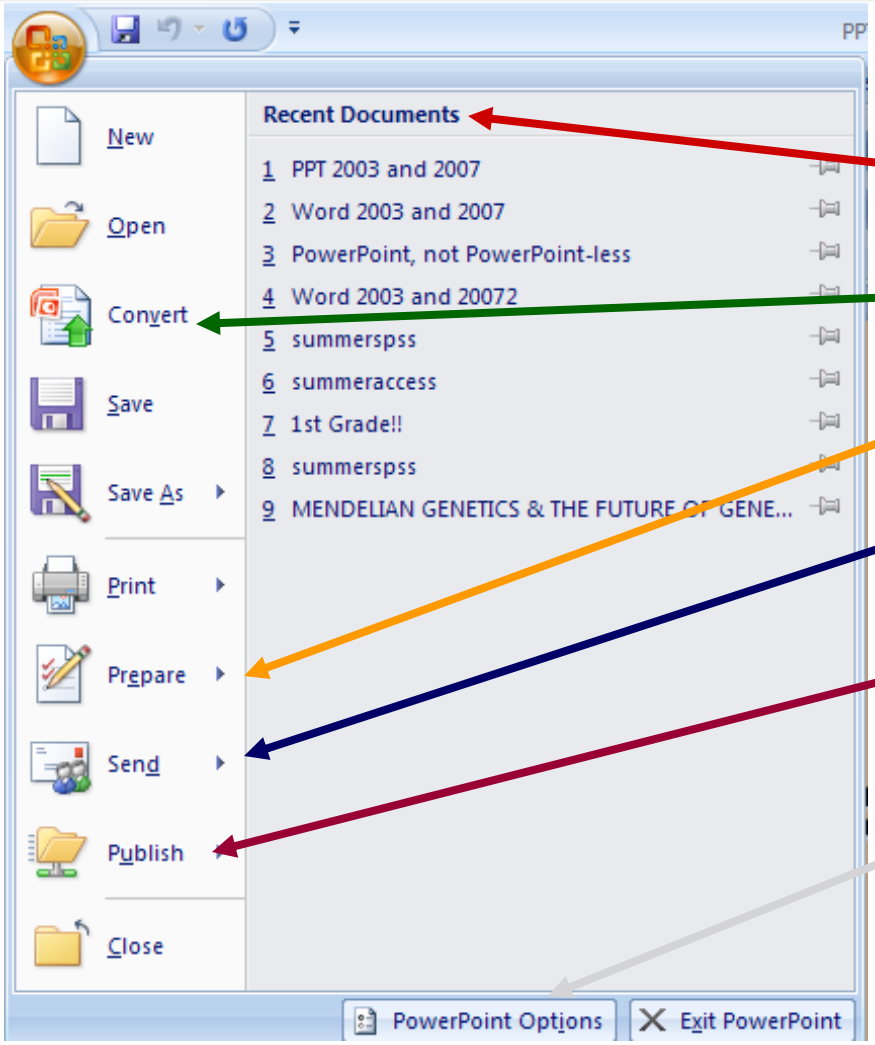
- Ribbon: It replaces the previous versions menu bar and drop down menus, user interface is based on the ribbon it shows all the commonly used options needed to perform a particular task.
- Office button: It replaces the file menu option i.e., from this button we can open, save, print and exit as well as the Excel options button that enables us to change Excel's default settings.
- Quick Access Toolbar: It is a small toolbar next to the office button contain shortcuts for some of the most common commands such as save, Undo and Redo buttons.

The MS Office Button



- The MS Office Button is a *New Feature* of PowerPoint 2007. It replaces the **File Menu**
- It is the access point to:
  - **Create New PowerPoint presentations**
  - **Open**
  - **Save**
  - **Print**
  - **Close**

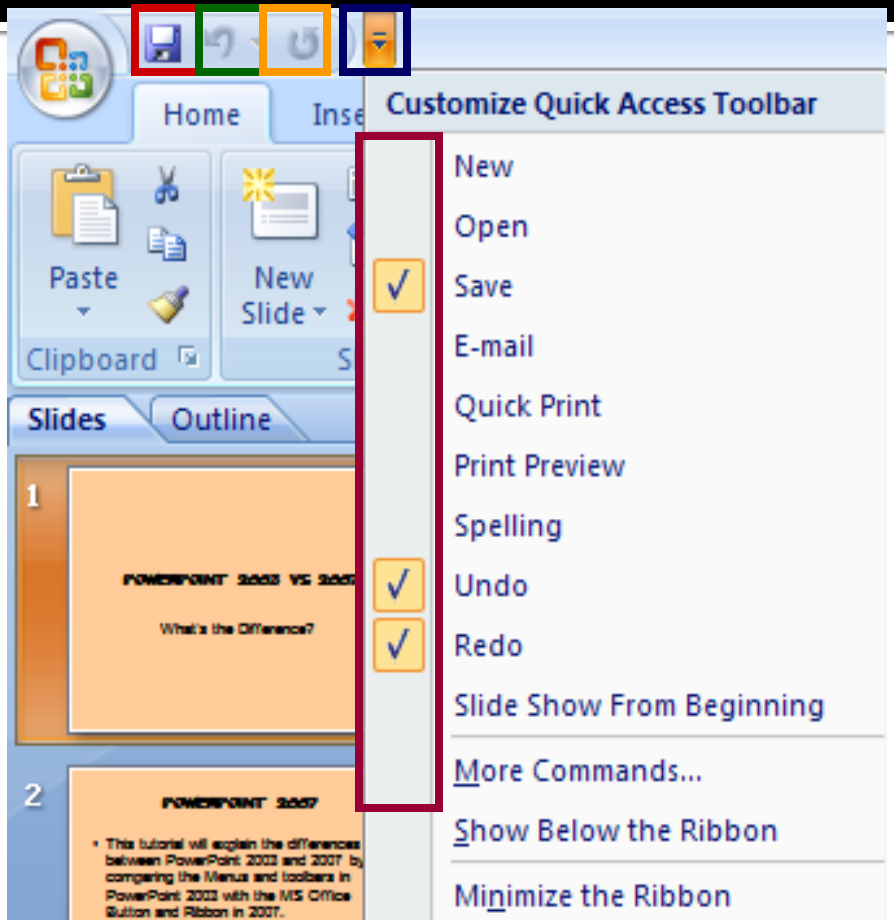
The MS Office Button



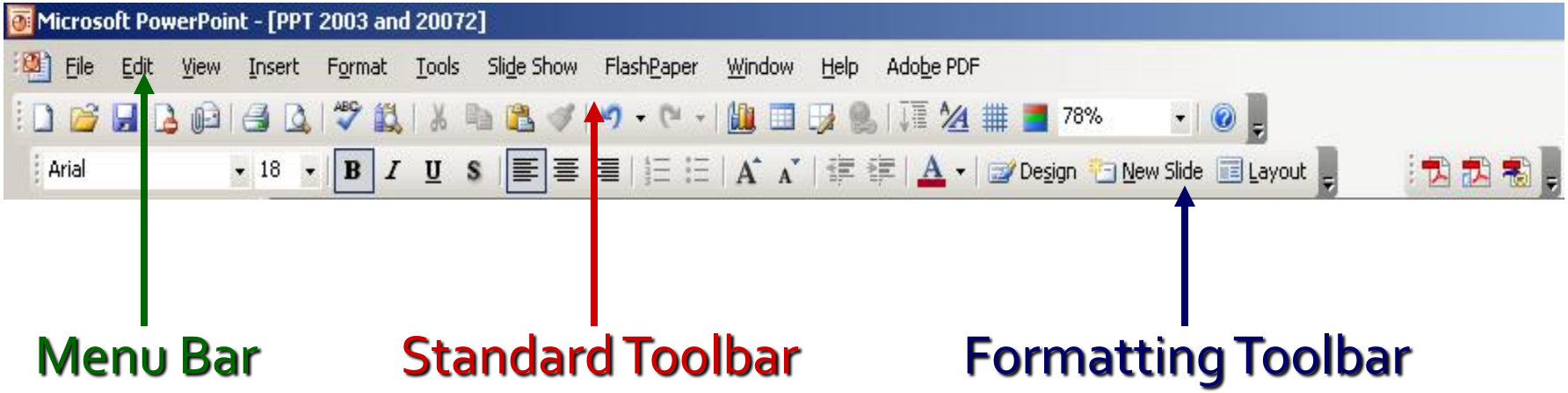
- The MS Office Button also houses
  - **Recently Opened** presentations
  - **Convert** converts PowerPoint files into the 2007 Format
  - **Prepare** to finalize presentations for distribution
  - **Send** which distributes presentations through facsimile or email
  - **Publish** to distribute a presentation to a server, blog, or shared workspace
  - **PowerPoint Options** (previously located under the Tools Menu)

Quick Access Toolbar

- Located next to the MS Office Button, the **Quick Access Toolbar** offers one-click access to the most widely used office functions.
- By default, there are 3 buttons **Save, Undo,** and **Redo.**
- Click on the **arrow** next to the toolbar, to open the customize Menu
- Click the **checkbox** next to each feature to add and more options to the toolbar
- *This is a New Feature*

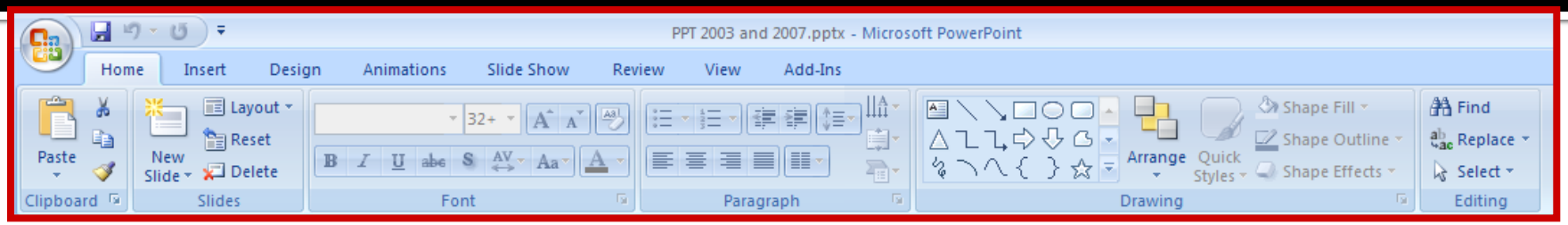


Menus and Toolbars - 2003



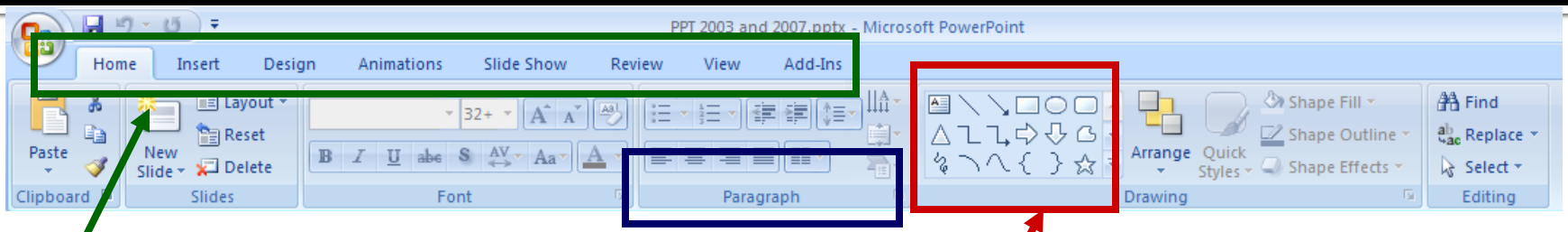
- In PowerPoint 2003, different functions within PowerPoint are accessed through the **Menu Bar**, **Standard Toolbar,** and the **Formatting Toolbar**

Menus and Toolbars - 2007



- Office 2007 is arranged differently. All Menus are located within tabs on a Menu bar called the **Ribbon**
- The three parts of the Ribbon are **Tabs**, **Groups,** & **Commands**.

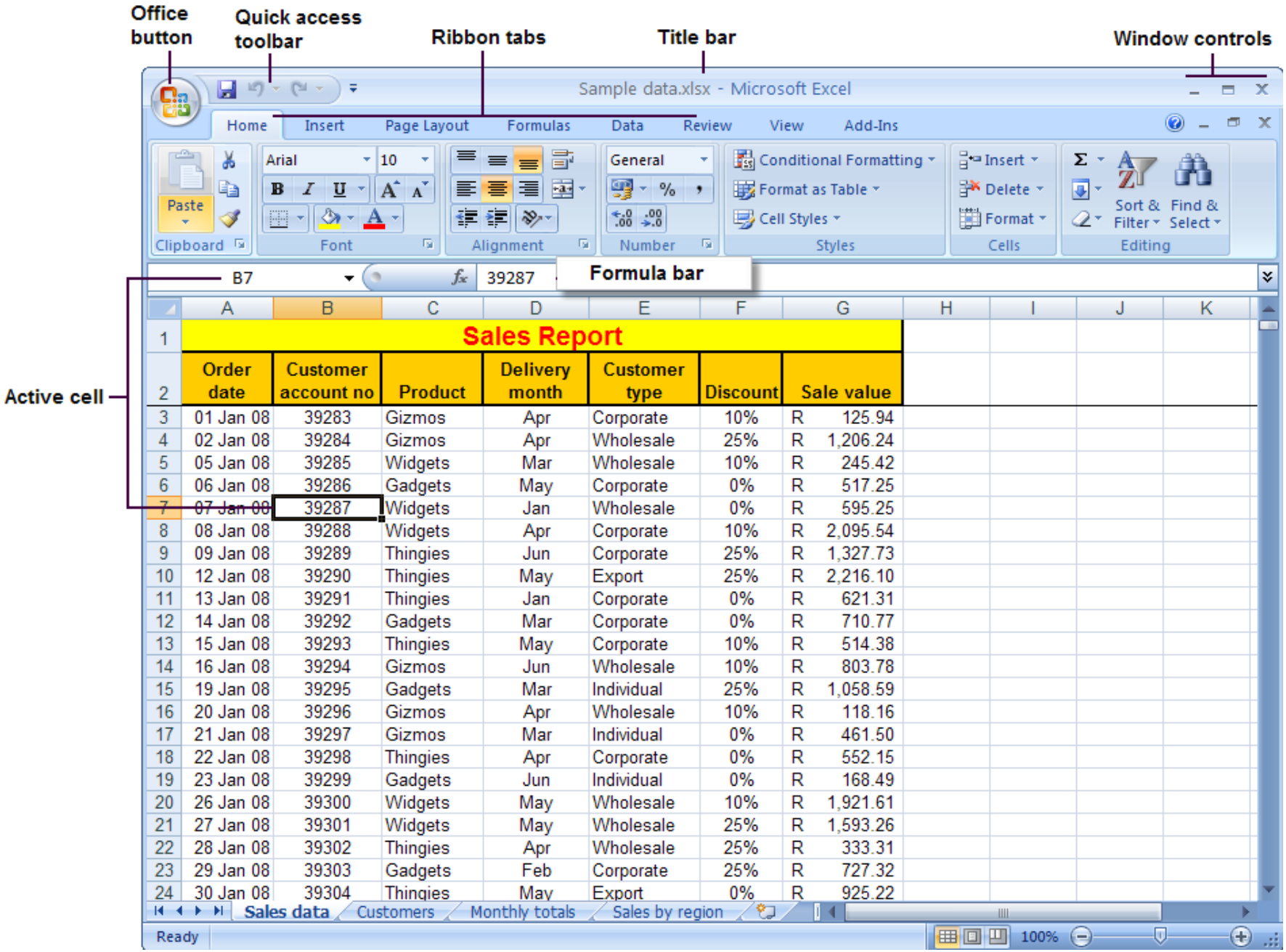
The Ribbon



Tabs: 8 tabs representing common related activities

Groups: Sections containing Related items or tasks

Commands: Buttons, boxes or Menus relating to specific functions within PowerPoint


Office button
Quick access toolbar
Ribbon tabs
Title bar
Window controls
Sample data.xlsx - Microsoft Excel
Home
Insert
Page Layout
Formulas
Data
Review
View
Add-Ins
Paste
Clipboard
Arial
10
Font
Alignment
General
Number
Conditional Formatting
Format as Table
Cell Styles
Styles
Insert
Delete
Format
Cells
Sort & Filter
Find & Select
Editing
B7
39287
Formula bar
Active cell
Sales Report
Order date
Customer account no
Product
Delivery month
Customer type
Discount
Sale value
01 Jan 08 39283 Gizmos Apr Corporate 10% R 125.94
02 Jan 08 39284 Gizmos Apr Wholesale 25% R 1,206.24
05 Jan 08 39285 Widgets Mar Wholesale 10% R 245.42
06 Jan 08 39286 Gadgets May Corporate 0% R 517.25
07 Jan 08 39287 Widgets Jan Wholesale 0% R 595.25
08 Jan 08 39288 Widgets Apr Corporate 10% R 2,095.54
09 Jan 08 39289 Thingies Jun Corporate 25% R 1,327.73
12 Jan 08 39290 Thingies May Export 25% R 2,216.10
13 Jan 08 39291 Thingies Jan Corporate 0% R 621.31
14 Jan 08 39292 Gadgets Mar Corporate 0% R 710.77
15 Jan 08 39293 Thingies May Corporate 10% R 514.38
16 Jan 08 39294 Gizmos Jun Wholesale 10% R 803.78
19 Jan 08 39295 Gadgets Mar Individual 25% R 1,058.59
20 Jan 08 39296 Gizmos Apr Wholesale 10% R 118.16
21 Jan 08 39297 Gizmos Mar Individual 0% R 461.50
22 Jan 08 39298 Thingies Apr Corporate 0% R 552.15
23 Jan 08 39299 Gadgets Jun Individual 0% R 168.49
26 Jan 08 39300 Widgets May Wholesale 10% R 1,921.61
27 Jan 08 39301 Widgets May Wholesale 25% R 1,593.26
28 Jan 08 39302 Thingies Apr Wholesale 25% R 333.31
29 Jan 08 39303 Gadgets Feb Corporate 25% R 727.32
30 Jan 08 39304 Thingies May Export 0% R 925.22
Sales data
Customers
Monthly totals
Sales by region
Ready
100%

Cell, Row Range, Column Range and Cell Range

- Cell: the intersection of rows and columns are known as cell. It is identified by a name which consists column name and row number such as A8 which denotes column A and row number 8.
- Row Range: Selection of multiple column in a single row is known as row range such as A1:F1.
- Column Range: Selection of multiple rows in a single column is known as column range such as A1:A15.
- Cell Range: Selection of multiple rows and columns simultaneously is known as cell range such as A1:F15.

Formulas in MS-Excel 2007

- Formula: Formulas is a collection of operators and operands, which is defined by users. A formula is always start with equal to (=) sign in a specific cell where we want the resultant value.

Example: If we want to calculate the percentage of Obtained marks then we can define a formula in a specific cell such as :

=Obtained marks/Total Marks *100

we can also give the reference of cell instead values of cell in formula, Such as :

= C1/d1*100

When the value of referenced cell change, it will also affect the cell value of where formula is used. This is called WHATIF analysis.

Built-in Functions of MS-Excel 2007

Function: Functions are prewritten formulas that operates on one or more values and returns desired results. Each function is identified by a name followed by a set of arguments. It is differ from regular formulas in that we supply the value but not the operators. MS-Excel has more than 300 built-in functions divided into various categories, including;

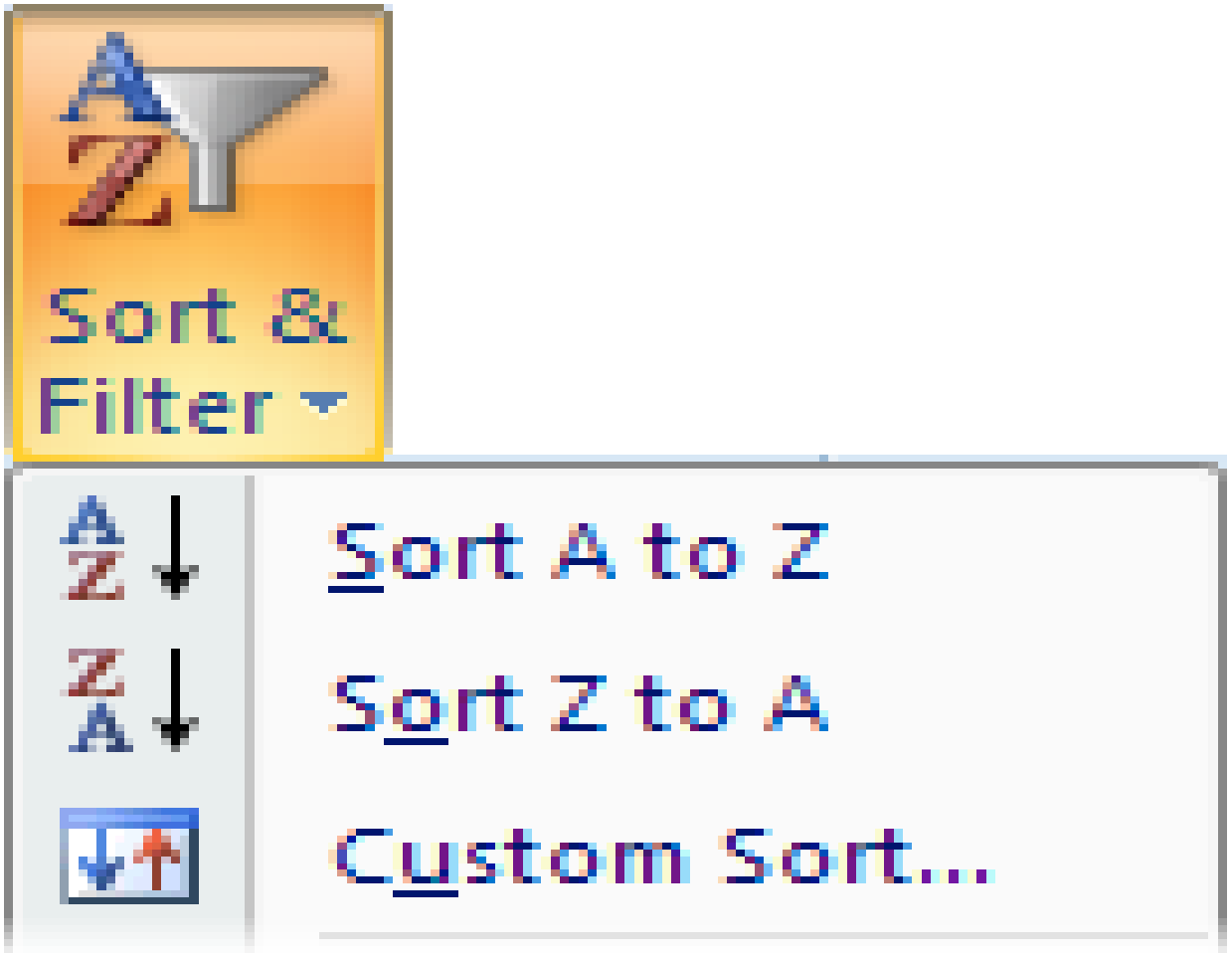
- Financial
- Logical
- Math and Trigonometry
- Statistical
- Engineering
- Cube
- Square Root
- Information
- Database
- Lookup and Reference

Important features of MS-Excel

- Fill Series: Through this feature we can easily fill the numbers, roll numbers, any series with any format through dragging with selection of specified cell. Example: if we want to fill a column with s.no. then we use fill series option and specify the series starting and ending point.
- Sorting: Through his feature we can arrange our records or data in ascending or descending order with specified column. By default order of sorting is numbers first, Capital letters, Small letters and then alphanumeric.

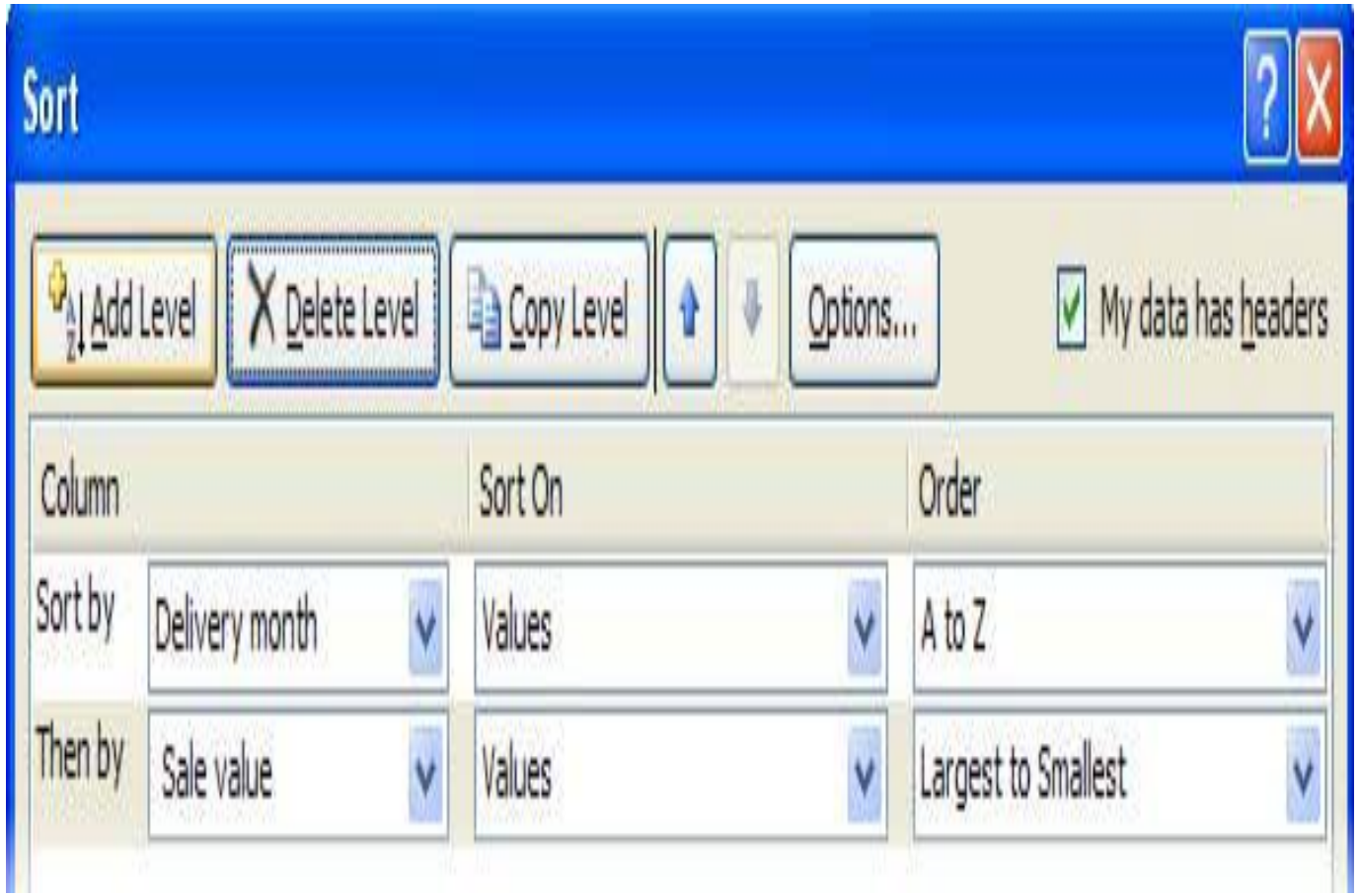
Process of Sorting

- If you want to sort an *entire data table:*
- 1. Click anywhere in the column that you want to sort by.
- 2. On the Home ribbon, select ***Sort & Filter.***
- 3. Choose either Ascending (Sort A to Z) or Descending (Sort Z to A)
- order.
- 4. Your data will be sorted based on the value in the column that you
- initially clicked on.


Sort &
Filter
Sort A to Z
Sort Z to A
Custom Sort...

Process of Sorting

- If you want to sort on two or more criteria (columns), or if you want to sort a range of cells,
- then you need to do a *custom sort:*
- 1. Click in the data table, or select the cells to be sorted.
- 2. On the Home ribbon, select ***Sort & Filter, and choose Custom Sort. The Sort***
- Window will open.


Sort
Add Level
Delete Level
Copy Level
Options...
My data has headers
Column
Sort On
Order
Sort by
Delivery month
Values
A to Z
Then by
Sale value
Values
Largest to Smallest

Process of Sorting

- 3. In the ***Sort By field, use the drop-down arrows to select the column that you want to***
- sort by and the order (ascending or descending) to be used.
- 4. If you want to add another sort criterion, then click the ***Add Level button, and a***
- second details row will appear in the window. Again, choose the sort column and sort
- order.
- 5. Add more levels (or delete levels) as required.
- 6. When you click the ***OK button at the bottom of the window, your data will be sorted.***

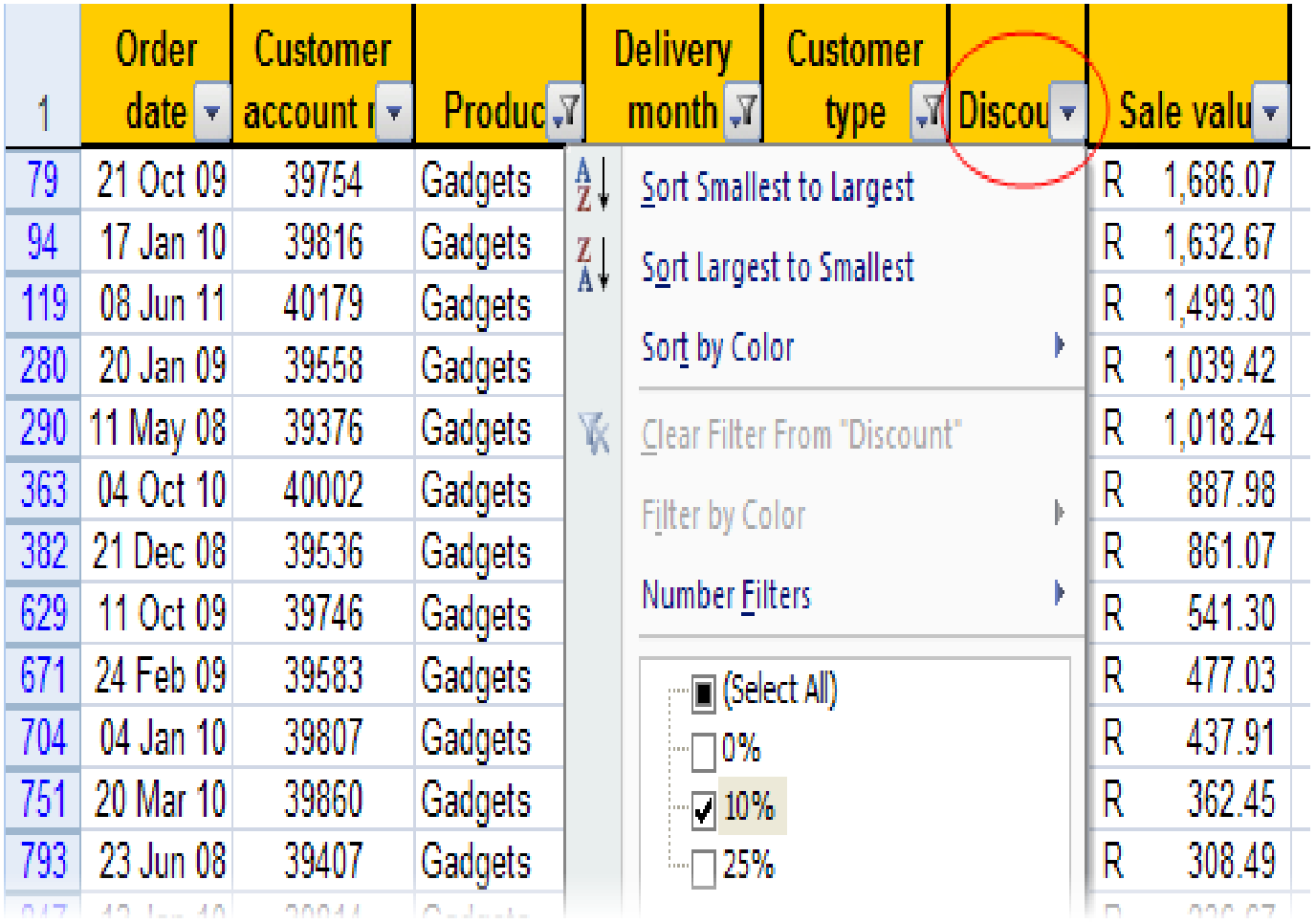
Important features of MS-Excel

- Filter: This feature enable us to select specific records from a group of records, that is, we can select the data or records according to the specified heading of columns.

Example: If we want to see the list of students who participated in cricket then we can put the filter on the column which have heading game. It shows a pull down menu which has multiple option according to games then select cricket from available options, it will display the name of only those student who partcipated in cricket.

Process of using Filter

- The filter function lets you view just the records that you want to see!
- The other records in your data table will still be there, but hidden.
- To use this amazing function:
- 1. On the Home ribbon, select ***Sort & Filter, and select the Filter option.***
- In the first row of your data table, a drop-down arrow will appear on the right of each column heading.
- When you click on a drop-down arrow, you'll see a list of all the values occurring in that column.
- Press [ESC] to close the filter list.


1
Order date
Customer account r
Produc
Delivery month
Customer type
Discou
Sale valu
79 21 Oct 09 39754 Gadgets R 1,686.07
94 17 Jan 10 39816 Gadgets R 1,632.67
119 08 Jun 11 40179 Gadgets R 1,499.30
280 20 Jan 09 39558 Gadgets R 1,039.42
290 11 May 08 39376 Gadgets R 1,018.24
363 04 Oct 10 40002 Gadgets R 887.98
382 21 Dec 08 39536 Gadgets R 861.07
629 11 Oct 09 39746 Gadgets R 541.30
671 24 Feb 09 39583 Gadgets R 477.03
704 04 Jan 10 39807 Gadgets R 437.91
751 20 Mar 10 39860 Gadgets R 362.45
793 23 Jun 08 39407 Gadgets R 308.49
Sort Smallest to Largest
Sort Largest to Smallest
Sort by Color
Clear Filter From "Discount"
Filter by Color
Number Filters
(Select All)
0%
10%
25%

Process of using Filter

- If you want to view records with a particular value only, click to uncheck the Select All
- option, and then check one or more values that you want to view. Click the ***OK***
- button. (The example above has already been filtered on Product, Delivery month
- and Customer Type, and is about to be filtered on Discount as well.)

Process of using Filter

- All rows that do not contain the value(s) you checked, will be hidden from view. A
- column that has been filtered will show a funnel icon next to the drop-down arrow on
- the heading.
- 5. Repeat the filtering process for as many columns as you need. You can remove a
- column filter by checking its ***Select All option.***

Process of usingFilter

- To clear your previous filter settings, select ***Sort & Filter, and then Clear.***
- To turn off filtering, select ***Sort & Filter, and then Filter (the same option that you originally***
- used to turn it on).
- Note that the Sort function is also available from the Data ribbon.

Important features of MS-Excel

- data in a well-conceived chart can make our numeric data more understandable. To create a chart we must have some number in cells in an Excel worksheet.
- Types of Charts:
  - Column
  - Line
  - Pie
  - Bar
  - Area
  - Scatter
  - Stock
  - Surface
  - Radar

Every chart type has category of subtypes we have to choose one of them form available lists.

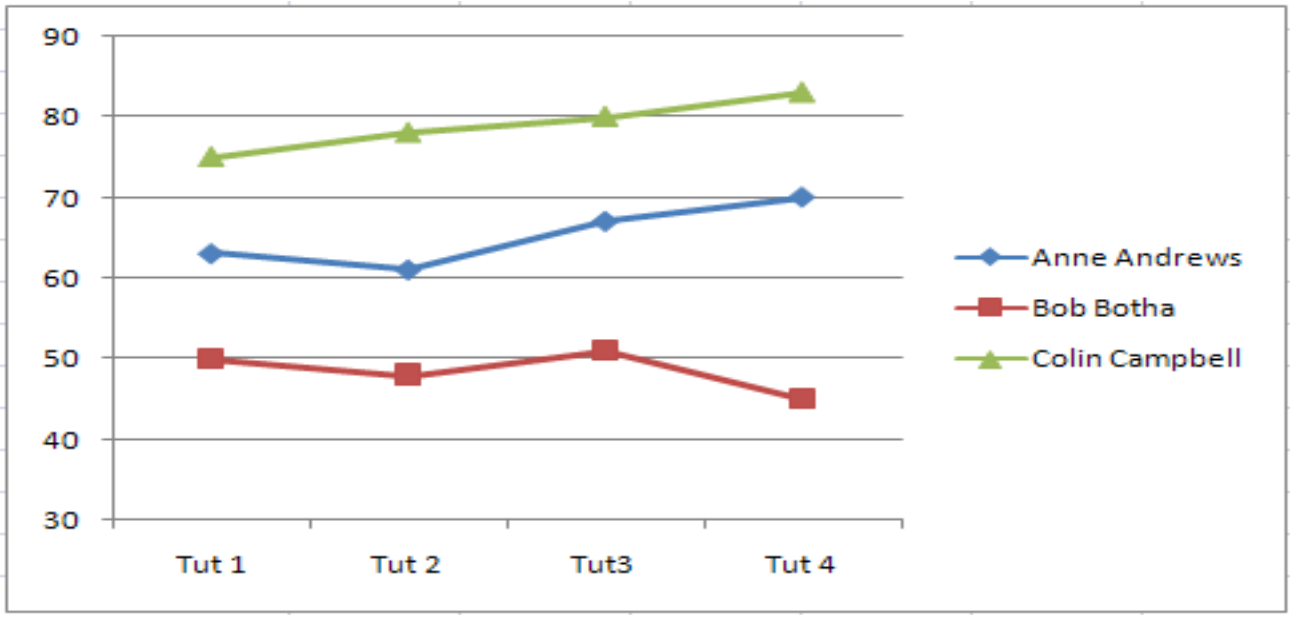
Charts

- A picture is worth a thousand words! Often it's much easier to understand data when it's
- presented graphically, and Excel provides the perfect tools to do this!
- It's worth starting with a quick outline of different data types and charts:
- *Categorical data items belong to separate conceptual categories such as knives, forks and*
- spoons; or males and females. They don't have inherent numerical values, and it doesn't
- make sense to do calculations such as finding an average category. A pie chart or column
- chart is most suitable for categorical data.

Process of Creation of Chart

- It’s very easy to create a basic chart in Excel:
- 1. Select the data that you want to include in the chart (together with column headings if you have them).
- 2. Find the Charts category on the Insert ribbon, and select your preferred chart type.

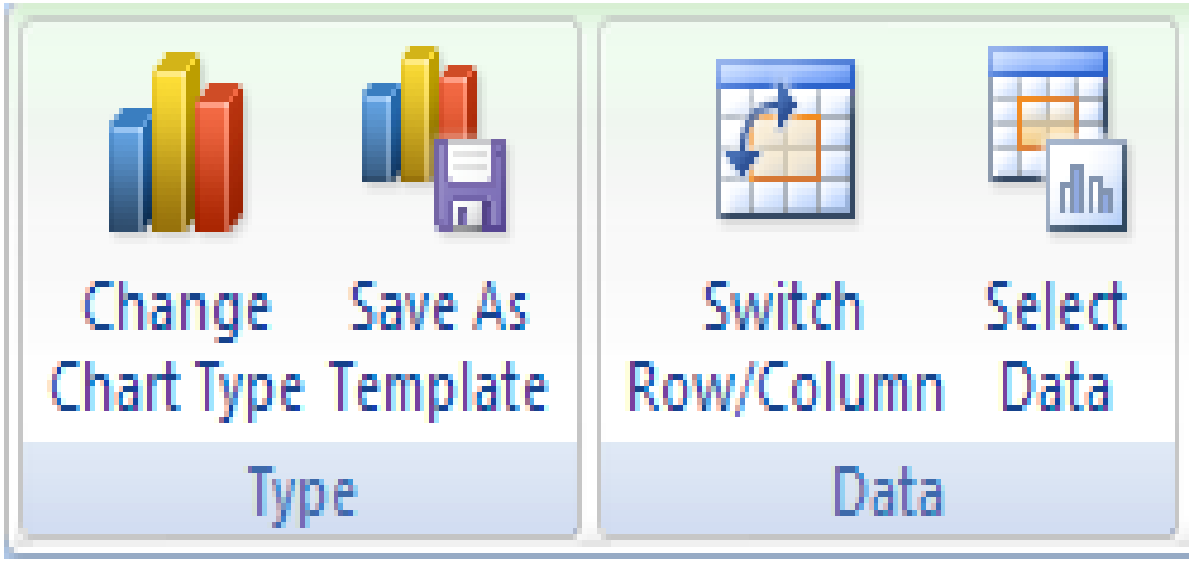
That's it! The chart appears in the current window. Move the cursor over the Chart Area to drag it to a new position.



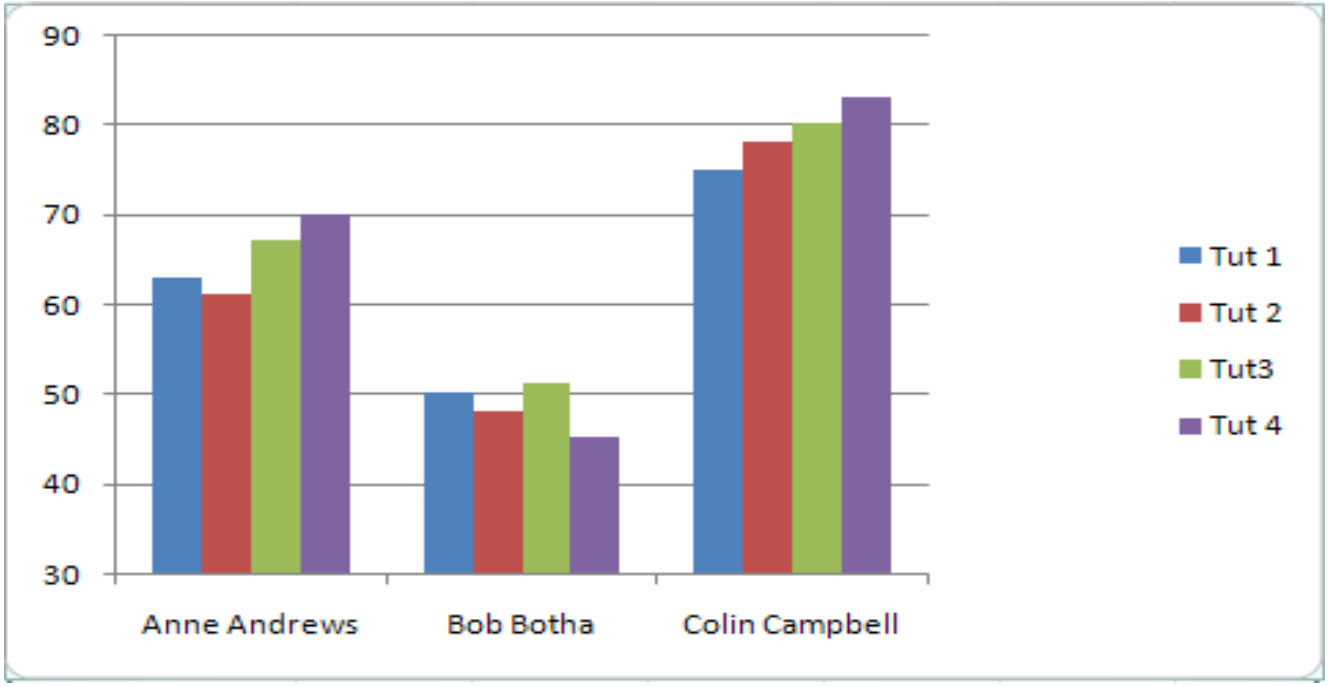
Modifying a chart

When you click on a chart, a Chart Tools section appears on your Ribbon, with Design, Layout and Format tabs.

Use the ***Design tab to quickly change the chart type, or to swap data rows and*** columns.



In this example, I've changed the previous chart type to Column, and swapped rows and columns. All it took was two mouse clicks!



Use the ***Layout tab to add a title, and to provide axis and data labels.***
Use the ***Format tab to add border and fill effects.***

Important features of MS-Excel

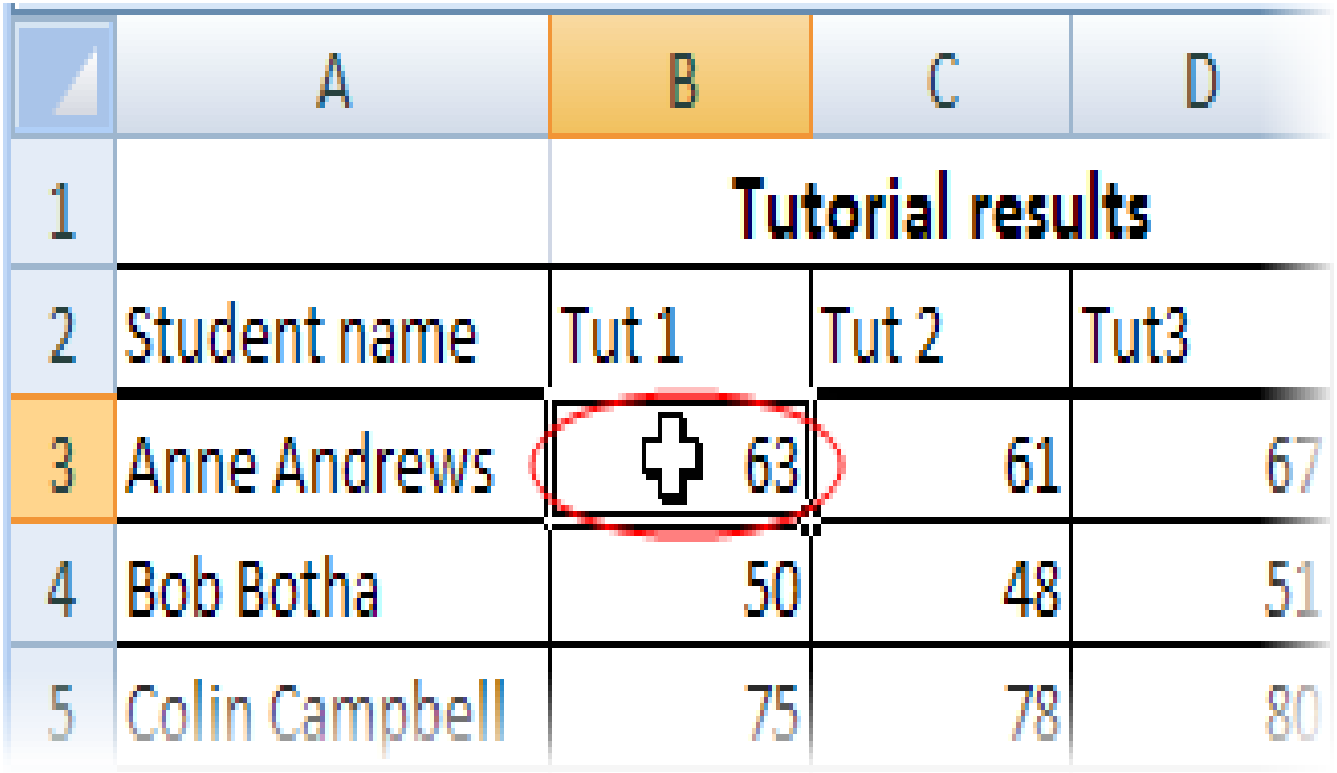
- Freeze Panes: It enable us to freeze the required rows or columns in a worksheet. If we have more than 100 records with multiple column, then we can freeze the row where we define the headings in columns, which holds the heading row and hide records which can be seen by scroll bars.

Keeping row and column headings in view

- If you scroll through a lot of data in a worksheet, you'll probably lose sight of the column
- headings as they disappear off the top of your "page". This can make life really difficult –
- imagine trying to check a student's result for tutorial 8 in row 183 of the worksheet! And it's
- even more difficult if the student's name in column A has scrolled off the left edge of the
- window.

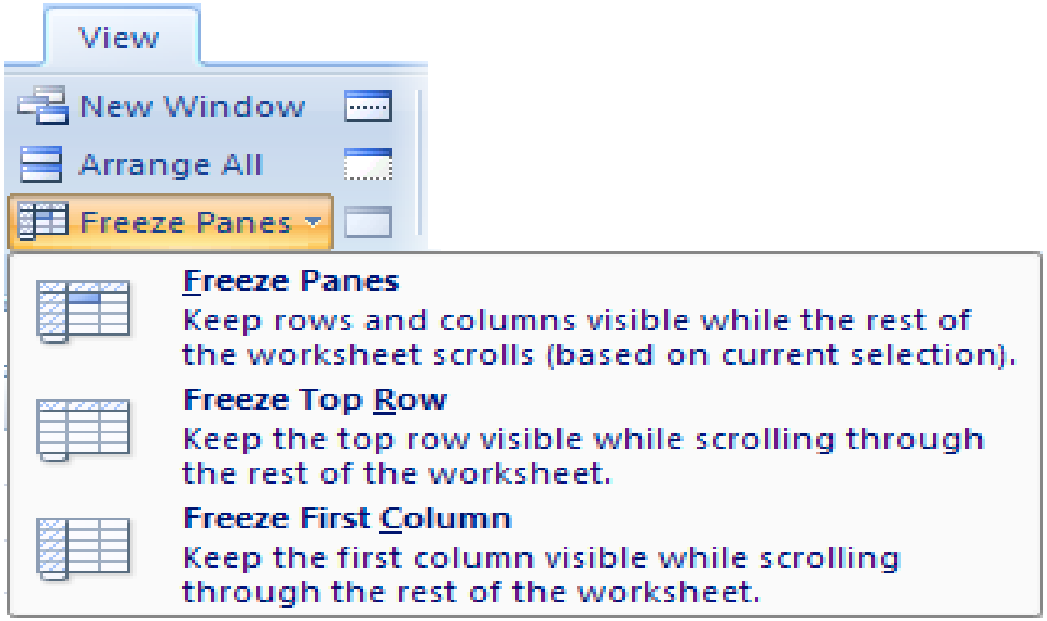
Process of Freeze panes

- The Freeze Panes feature allows you to specify particular rows and columns that will always
- remain visible as you scroll through the worksheet. And it's easy to do!
- Select a cell immediately below the rows that you want to remain visible, and immediately to
- the right of the columns that you want to remain visible. For example, if you want to be able to
- see Rows 1 and 2, and column A, then you would click on cell B3.



	A	B	C	D
1		**Tutorial results**		
2	Student name	Tut 1	Tut 2	Tut3
3	Anne Andrews	63	61	67
4	Bob Botha	50	48	51
5	Colin Campbell	75	78	80

On the View tab, click ***Freeze Panes, and select the first option.***



If Freeze Panes has already been applied, then the ribbon option automatically changes to ***Unfreeze Panes.***

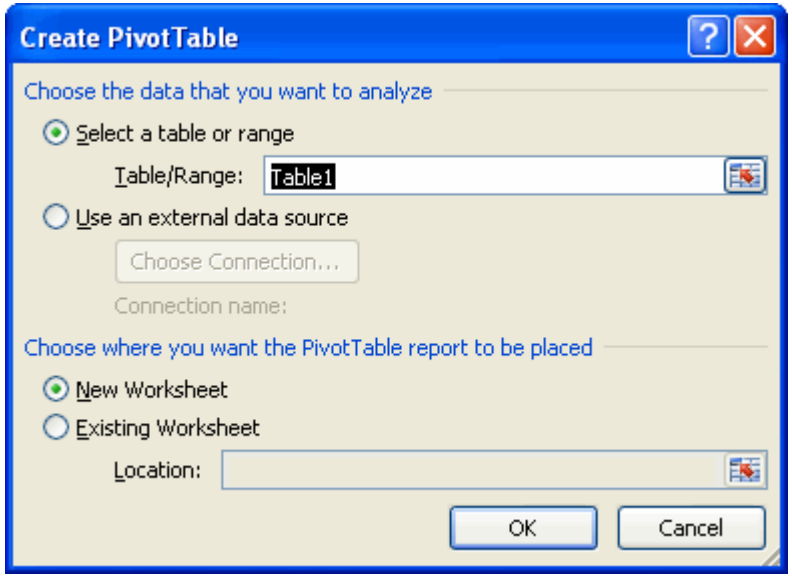
Pivot Table

- Pivot table reports, or **pivot tables** as they are often called, can help you answer questions about your spreadsheet by analyzing the numerical information in various ways. If you work with spreadsheets with a lot of data, pivot tables can be an extremely useful tool. Pivot table reports give you power because you can **quickly find the answer** to many different questions and can manipulate your data in many different ways.
- **Why are They Named Pivot Tables?**
- You may be wondering why it is called a pivot table. Basically, pivot tables allow you to **pivot**, or **move**, data so that you can produce answers to questions. Once you create a pivot table, you can very easily see what effect pivoting the data has on the spreadsheet information.

To Create a Pivot Table Report

- Select the cells in your spreadsheet that you want to use in the pivot table report.
- Select the **Insert** tab.
- Click the **PivotTable** command.
- Click **PivotTable** again. Excel selects cells in the actual spreadsheet, and the **Create PivotTable** dialog box opens.
  - **Select a table or range** is already selected, and the **Table/Range** field shows the range of the selected data. **New Worksheet** is also selected by default as the place where the report will be placed.
- Click **Existing Worksheet** and select a worksheet if you do not want the pivot table to appear in a new worksheet.
- Click **OK**.

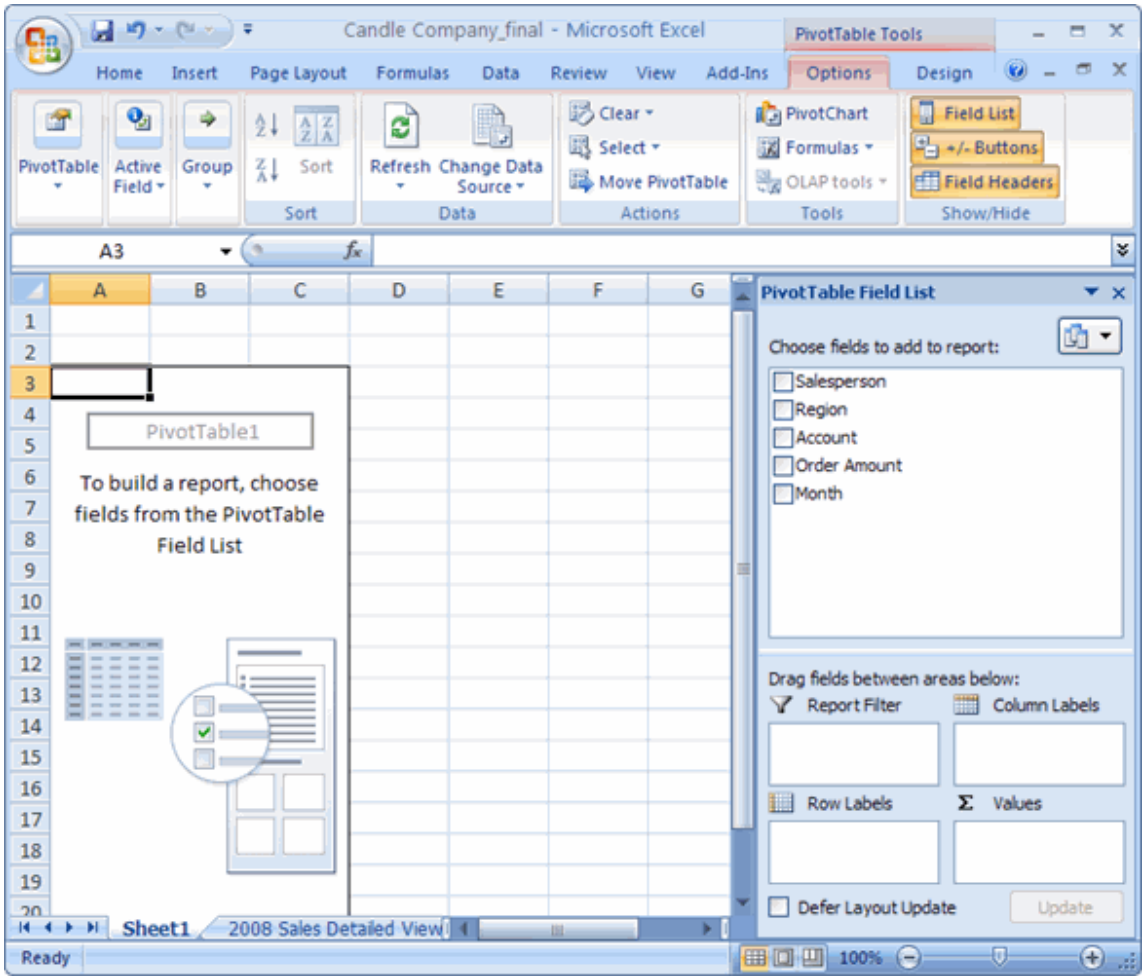
To Create a Pivot Table Report



To Create a Pivot Table Report

- **Creating a Pivot Table Report**
- If you use the sample spreadsheet to create a pivot table, you can see that the column headings are **salesperson**, **region**, **account**, **order amount**, and **month**. When you create a pivot table, each **column label** in your data becomes **a field** that can be used in the report. The **Field List** appears on the right side of the report, while the **layout area** appears on the left.

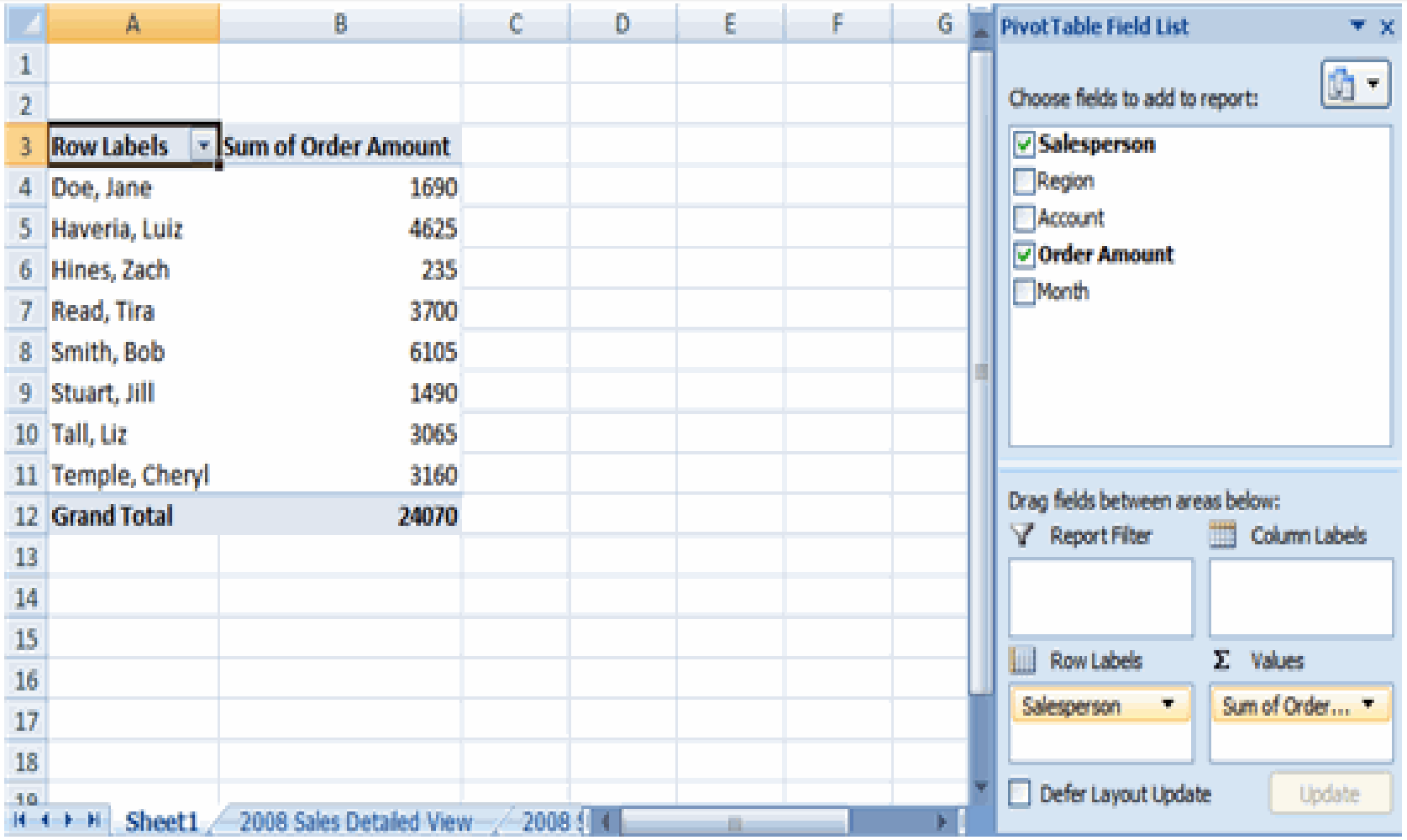
To Create a Pivot Table Report



To Create a Pivot Table Report

- Determine what **question** you want your pivot table report to answer. For example, using the sample spreadsheet, you might want to know **which salesperson sold the greatest dollar amount**.
- Determine the **fields** that are necessary to answer this question. In this example, **salesperson** and **order amount**.
- Select the check box next to the **Salesperson field** in the **PivotTable Field List**. The field will appear in the drag-and-drop area at the bottom of the field list and in the layout area. The order amount data appears on the right. This is a default setting in Excel—data with numbers will always appear on the right.
- Select the check box next to the **Order Amount field** in the **PivotTable Field List**. The field will appear in the drag-and-drop area at the bottom of the field list and in the layout area. All of the salesperson data appears on the left side as rows.
- You can now see the **answer to your question** in the **report** on the left.

To Create a Pivot Table Report



Row Labels	Sum of Order Amount
Doe, Jane	1690
Haveria, Luiz	4625
Hines, Zach	235
Read, Tira	3700
Smith, Bob	6105
Stuart, Jill	1490
Tall, Liz	3065
Temple, Cheryl	3160
Grand Total	24070

To Create a Pivot Chart

- **To Create a PivotChart**
- Select the **Pivot Chart** command from the Options tab. The Insert Chart dialog box appears.
- Select the chart you'd like to insert.
- Click OK. The chart will now appear on the same sheet as the Pivot Table.
- The information in the chart includes the information in the pivot table, rather than all the original source data.

To Create a Pivot Chart