

Creating Spreadsheets and Charts Using *Microsoft Excel*

Microsoft Excel is a spreadsheet program that allows the operator to organize numeric data, perform calculations, make decisions, create graphs using data, develop reports, place files on the Web, and access the Web.

Key Terms:

- Spreadsheet:** Rows and columns of data organized in a systematic way that allows the computer to make calculations of the data and to update the calculations as the data changes. In *Microsoft Excel*, spreadsheets are called workbooks.
- Row:** A horizontal set of cells in a worksheet grid.
- Column:** A vertical set of cells in a worksheet grid.
- Cell:** A cell is the intersection of a row and a column in a worksheet grid.
- Range:** A range is a defined area of a worksheet. For example, selecting the cells F4, F5, and F6 can be indicated as F4:F6.
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To Create a New Spreadsheet:

- Click on the Start button: click New Office Document and under the General Tab, click Blank Workbook OR click *Microsoft Office XP* and *Microsoft Excel*.
- To create an additional spreadsheet with Excel open, click on File Menu and New, and from the Frame on the right, click on Blank Workbook

To Add a Row or Column:

- Place the cursor in a cell where you want to add a column to the left of the cell or a row above the cell.
- Click on Insert in the Menu Bar.
- Select either Insert Rows or Insert Columns.
- A new row will be added above the cursor if you select Insert Rows or a new column will be added to the left of the cursor if you select Insert Columns.

To Delete a Row or Column:

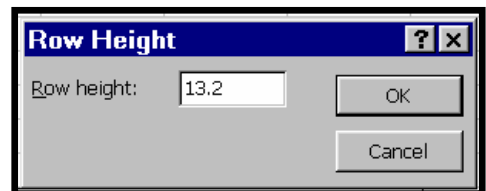
- Select a column or a row by clicking on the column letter or the row number.
- Click on Edit in the Menu Bar.
- Select Delete.

To Fill Down or Fill Across:

- Place the cursor in a cell. (*This cell then becomes the active cell.*)
- Point to and left-click on the small “handle” in the lower right corner of the active cell.
- Fill down or fill across to the desired ending cell address.

To Change the Column Width or Row Height:

- Select the column or row that you want to change.
- Click on Format in the Menu Bar.
- Click on Row or Column; choose Height for row or Width for column.
- Type number in the Height (or Width) box.
- Click OK.



OR — You can change row height (or column width) by placing the mouse pointer on the row or column divider line between the row letters (or column letters). When the mouse pointer turns into a vertical line with the arrows pointing in two directions, click and drag the divider line to the left or right until column is the desired size.

To Hide and Unhide a Column or Row:

- To Hide: Right-click on a column letter or a row number.
- Select Hide. (It will appear that the column or row is deleted, but it is only hidden.)
- To Unhide: Select the columns or rows preceding and following the “hidden” column or row.
- Right-click and select Unhide.

To Navigate in the Spreadsheet:

To move from cell to cell:

- Move the mouse pointer to the cell you want and click to select the cell.
- Type in the data.
- Press the tab key to move to the next cell horizontally, press ENTER to move to the next cell vertically, or use the arrow keys to move down or across the worksheet.

To move the document on the screen one row or column at a time:

- Click on the scroll arrows in either the vertical or horizontal scroll bars.

Excel Calculation Functions:

Examples:

- =SUM(C1:C4)
- =AVERAGE(D3:I8)
- =ROUND(E3:E4)
- =MAX(B1:B10)
- =MIN(B1:B10)

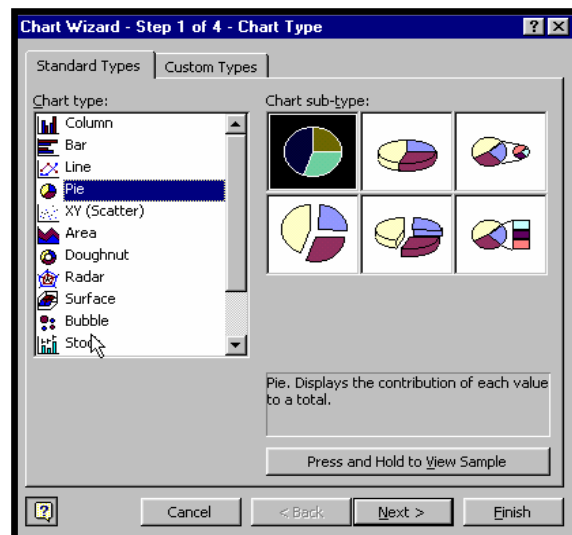
Excel IF Statement:

- An IF Statement is written in the following format: =IF(CONDITION,X,Y).
- Example: =IF(A3=C3,"GREAT","TRY AGAIN")
- The condition is a True/False question.
- The results will reveal whether the condition is True or False.

Create a Chart from a Spreadsheet:

Types of Charts:

- Column
- Bar
- Line
- Pie
- XY (Scatter)
- Area
- Doughnut
- Radar
- Surface
- Bubble
- Stock
- Cylinder
- Cone



In a spreadsheet select the data you want to chart.

- Click on Insert in the Menu Bar.
- Click on Chart to create a chart.
- Select a chart type from the list shown, click Next.
- Select the Data Range, click Next.
- Under the Titles tab, add the Chart Title, the Category (X) Axis, and the Value (Y) axis.
- Make any desired changes to the Axes, Gridlines, Legend, Data Labels, or Data Table. Click Next.
- Click to add the chart As a New Sheet (as a separate page) or As an Object in the existing worksheet.

Note: Once a chart is created, the chart is linked to the spreadsheet data. If the spreadsheet data is changed, the chart automatically reflects this change.

To View a Chart Stored with a Spreadsheet:

- Click on the Chart 1 tab at the bottom of the spreadsheet to select the chart.

To Return to the Spreadsheet:

- Click on the Sheet 1 tab at the bottom of the spreadsheet.

To Print a Chart:

- Open the spreadsheet containing the chart.
- Click on the appropriate Chart at the bottom of the spreadsheet.
- When the chart is displayed, click on File in the Menu Bar.
- Click Print.