




# General Microsoft Excel Instructions

## Cell Addresses

- Click on a cell, Address = Column Letter & Row Number (e.g. **C6**)
- Cells in another workbook (e.g., **Data**), Address = **SheetName!Cell** (e.g., **Data!C6**)
- Range of cells, Address = **UpperLeft:LowerRight** (e.g., **A1:A20**, **A1:B20**, **Data!A1:B20**)

Cursor	Nickname and function
	"Swiss cross" Used for selecting cells
	"Crosshair" Used for copying formula or extending a data series.
	"Click and drag" cursor Cuts and pastes selected area – generally not recommended.

## Entering Data

- Click on a cell and begin typing; press "**ENTER**" when finished.
- Correcting Data: highlight the cell and retype OR double click the cell to edit.

## Copying Data (with keyboard)

- Highlight the cells to be copied: hold "**SHIFT**" and use the arrows to choose your range. Use "**CTRL**" to auto-select cells in your chosen direction.
- Copy with "**CTRL**"+"**c**". With the directional arrows, outline the top left of the desired cell range location; paste with "**CTRL**"+"**v**".
- Excel automatically moves all of the cells. However, if you select more cells than were in the original range, Excel begins repeating cells.

## Copying Data (with mouse)

- Highlight the cells to be copied: drag the cursor, holding the left mouse button.
- Right click the cell range and click the "Double-Page" (Copy) icon. Select the top left of the desired cell range location; right click the "Clipboard" (Paste) Icon.

## Copying from One Worksheet to Another

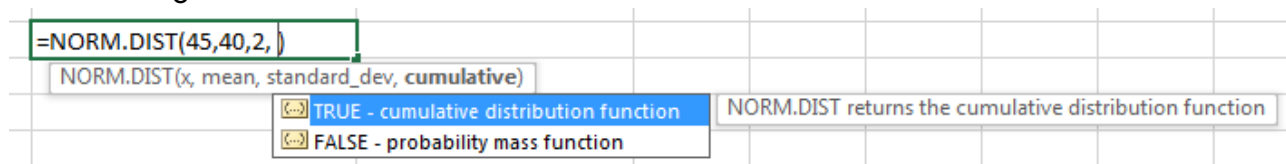
- Follow the instructions in **copying data**; highlighting new cells in a second worksheet.

## Formulas

- In your desired cell, type "**=**". Excel will now place the result of any calculation in this cell.

## Functions

- In your desired cell, begin a formula by typing “=” and begin typing the name of the function. When a menu pops up, you can arrow down to the desired function and press “**TAB**” to autocomplete the function name. “**SPACE**” exits the function name – don’t press space! Make sure you start the function argument with “(”.
- Excel uses the same function notation you learned in Algebra I and Trigonometry...  $f(x)$  where the first part is a function name (like *sin* – short for “sine”), parentheses ( ) to denote the argument, and some value for the argument, like  $x$ .
- However, Excel allows you to have multiple arguments separated by commas, and everything inside of an Excel function argument must be a number, a cell reference, or another function. Literal strings are also allowed by placing single quotation marks.
- Excel also tells you what kind of value it expects in each argument. Press “**TAB**” to accept a selected argument.



## Cell References

- Excel allows you to reference other cells (for example, cell **A1**) by typing the cell location, i.e. “**A1**”, in any formula.
- There are four kinds of cell references that matter especially when copying a formula:
  - **A\$1**: locks in row **1**.
  - **\$A1**: locks in column **A**.
  - **\$A\$1**: always refers to **A1**.
  - **A1**: free reference. Excel will use the relative location.
- When typing a cell reference or after clicking on it, you can cycle through cell reference types with “**F4**” (or type in the “**\$**” manually).

## Copying Formulas

- If using cell references, be sure to use the appropriate kind! (i.e., **A\$1**, **\$A1**, **\$A\$1**, **A1**)
- Enter the formula in a cell (press Enter when finished). Click on the cell. Copy the formula, as described above in copying data.
- Alternative for adjacent cells: Enter the formula in a cell. Place the pointer on the square in the lower right of the cell. Drag the + sign (“crosshair”) over the cells where the formula is to be copied.
- Cleverer alternative: *double-click* the tiny square at the bottom right of a cell (after “crosshair” appears)!

This is only a guide to get you started! Excel has many rich features.