



Excel Intermediate

common formulas, sorting, and filtering

Uses for Microsoft Excel:

- expenses
- budgets
- data to be analyzed, summarized, or graphed

Terminology

- worksheet = one page within a file (like a piece of paper in a ledger)
- workbook = an entire file (like a ledger)
- cell = location of one piece of data
- row = horizontal series of cells designated by a number
- column = vertical series of cells designated by a letter
- cell reference = location of a cell described by the intersection of a column and row (letter then number) (ex: A1)
- formula = math problem
- formula bar = displays data or formula within a selected cell (located at the top of the worksheet)

Sorting

- Sorting data changes the order of the data, not the data itself.
- When sorting, rows of information are kept together.
- Sort data as follows.
 - In the Data tab, click on the Sort tool.
 - Indicate whether or not the data has headers.
 - Choose a column to Sort by.
 - Click on Add Level to sort further.

Filtering

- Click on the Filter tool in the Data tab.
- Click on an arrow next to a column header to filter.
- Select an option to filter.
- To create a custom filter, select Number Filters and enter the required information into the dialog box which appears.
- Click on the Filter tool in the Data tab again to remove all filters.

Formulas

- To enter a formula, select a cell for the answer and type the formula in the formula bar.
 - A formula always starts with an equals sign (=).
 - Numbers and cell references may be used within the formula.
 - Indicate multiplication with an asterisk (*) and division with a slash (/).
 - After entering the formula, press Enter on the keyboard to display the result.

- The order of operations is followed within each formula. The order of operations dictates that functions are worked from left to right at each level starting at the top of the following list and progressing to the bottom.
 - parentheses (from the inside out)
 - exponents and roots
 - multiplication and division
 - addition and subtraction
- Use the Formulas tab as follows to enter common formulas.
 - Click on the Formulas tab.
 - Click on the arrow under the word AutoSum to display the AutoSum formula list.
 - Click on the desired formula.
 - Alter the formula as necessary.
 - Press Enter on the keyboard to display the result.

Common Formulas

- SUM is the most common formula.
 - The result is the total of the numerical data in all of the referenced cells.
 - The cell references are input as a range (ex: B2:B5).
- AVERAGE is also a common formula.
 - The result is the total of the numerical data in all of the referenced cells divided by the number of cells within the range containing numerical data.
 - The cell references are input as a range (ex: B2:B5).

Excel Tips

- Save often.
- Sort and filter data to ease searching.
- Use the AutoSum formula list to insert a formula and think about the cells referenced.
- Do not be afraid to ask for help.