

VETERANS UPWARD BOUND

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Microsoft Office Excel 2016

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Excel opens as a **workbook**, which is like a notebook. Inside the workbook are **worksheets**, with each sheet name displayed as a **sheet tab** at the bottom of the workbook. By default a new workbook opens with 1 worksheet, but if necessary you can add as many worksheets as your computer can accommodate

Each worksheet is organized in a rectangular grid containing **columns** and **rows**. A column letter above the grid, also called the column heading, identifies each column. A row number on the left side of the grid, also called a row heading, identifies each row. The intersection of each column and each row is a **cell**. The cell is the basic unit of a worksheet into which you enter data.

A cell is referred to by its unique address, or **cell reference**, which are the coordinates of the intersection of the column and a row. To identify a cell, specify the column letter first, followed by the row number.

Most experienced Excel users do not sit down and start entering text, formulas, and data into a blank Excel worksheet as soon as they have an assignment. Instead, they follow an organized plan, or methodology, that breaks the development cycle into a series of tasks. The recommended methodology for creating worksheets/workbooks includes:

1. Analyze requirements
2. Design Solution
3. Validate Design
4. Implement Design
5. Test Solution
6. Document Solution

In Excel, you can enter numbers into cells to represent amounts. Numbers can contain only the following characters:

0 1 2 3 4 5 6 7 8 9 + - () , / . \$ % E e

If a cell entry contains any other keyboard character (including spaces), Excel interprets the entry as text and treats it accordingly.

Formulas help you calculate and analyze data in a spreadsheet. When entering formulas, use cell references (example: A1+A2) instead of actual data (example: 10+20) whenever possible.

Every time you enter a value into a cell in the worksheet, Excel recalculates all formulas. It makes no difference whether the worksheet contains one formula or hundreds of formulas, Excel recalculates the formulas instantaneously. This is one of the reasons why a spreadsheet package is so powerful. To enter a formula using a cell reference you start with an equal sign (=), a plus sign (+), or a minus sign (-). If you do not begin with one of these characters, Excel interprets the formula as text.

Functions are ready-to-use formulas that help you perform specialized calculations. Excel has over 400 built-in functions.

Spreadsheet programs use the following **arithmetic operators**:

-	Subtraction
+	Addition
*	Multiplication
/	Division

The **order of operations** follows the same order as are used in algebra-multiplication and division, then addition and subtraction. Parentheses can be used to override the order of operations.

After entering all numeric entries, text, functions and formulas, the next step is to **format** the worksheet. You format to emphasize certain entries and make the worksheet easier to read and understand. The **font type** defines the appearance and shape of the numbers, letters, and special characters. The **font size** specifies the size of the characters on the screen.