

Spreadsheets

Before computers, people had to keep track of data by hand. Businesses had to track how much money came in, and how much went out. These books where they wrote the data were called ledgers. They had columns for debits, columns for credits, and they had to do the math by hand, or by calculator.

Spreadsheets are better than ledgers because they do the math for the user. They can be re-arranged, and the numbers and formulas changed without erasing. Once you learn how to use a spreadsheet, you can keep a ledger the easy way.

Parts of a Spreadsheet

A horizontal (side-to-side) line on a spreadsheet is called a **row**.

Rows are numbered. The row highlighted below is row 6.

A vertical (up and down) line on a spreadsheet is called a **column**.

Columns have letters. The column highlighted below is column B.

Each square of a spreadsheet is called a **cell**.

The highlighted square below is B6 (letter and number)

Usually, information is grouped using the columns. For example, if you had a list of friends and their phone numbers, you would put the names in a column, and the phone numbers in the next column over.

| | A | B | C | D |
|---|-------|---------------|---|---|
| 1 | Names | Phone Numbers | | |
| 2 | | | | |
| 3 | Amos | 801-465-0000 | | |
| 4 | Betty | 801-373-9120 | | |
| 5 | Carol | 801-555-1212 | | |
| 6 | Doug | 801-123-4567 | | |
| 7 | | | | |
| 8 | | | | |

It's very possible to do this the other way, using rows to group, but the columns are customary, and a bit easier. Getting into this habit is useful.

Labeling Cells

Each cell has a name that consists of a letter and a number. The letter is the column, and the number is the row. There are nearly unlimited rows and columns. Once you run out of letters, they start having double letters, such as AA, AB, AC, and so forth. This way, each cell has a unique identity. L17, B4, and AF6547 are three possible cell identities.

In each cell, you may have have three kinds of data, the label, the constant, and the formula.

1. A **label**. This includes anything containing text. Also, any strange symbols, or numbers mixed with other things (like the dashes in the phone numbers) is considered a label. On our table above, everything is a label.
2. A **constant**. A constant is any number. It can be a whole number, a decimal, or even a negative number. Only constants can be calculated. There are a couple symbols that can be included, such as dollar signs, percent signs, and commas. Examples: \$3,500 9.2% 57

3. A **formula**. Formulas are math equations. The weird thing about spreadsheets is that all formulas START with the equal sign. A formula may look like this: =5+3 or =3*6+4 or formulas may be more complicated. You can reference the cells in your formulas. For example, you don't have to say =5+3, you could actually reference the cells. If you wanted to add cells C5 and C7, you could write a formula in any cell using this format: = C5 + C7

We'll look at more formulas in a later lesson.

Math Symbols

One more thing before you get to experiment. You should know what the symbols are for the basic math functions. They're pretty easy.

| <u>Function</u> | <u>Symbol</u> | <u>Example 1</u> | <u>Example 2</u> | <u>Example 3</u> |
|-----------------|---------------|------------------|-------------------|------------------|
| Addition | + | = 4 + 5 | = 9.3 + 2.78 | = D4 + E7 |
| Subtraction | - | = 5 - 8 | = \$5.38 - \$2.17 | = A9 - C5 |
| Multiplication | * | = 3 * 7 | = 2.5 * 7.15% | = B1 * A6 |
| Division | / | = 8 / 3 | = \$85.27 / -2.5 | = F5 / B3 |

Look through these. You'll need to be familiar with them for the quiz.

Special Features: Graphs and Charts

Another useful feature of spreadsheets is the ability to make graphs and charts. You have already done this in a word processing program. Graphs and charts in a spreadsheet are similar, but may actually be easier. You can select a part of your data to turn into a graph or chart. You 'll do this later.

Quiz

You will be taking a quiz on spreadsheets. Some of the things you need to know are:

- The names of the rows, columns, and cells
- How cells are labeled (identified)
- The types of data that can be in a cell
 - label, constant, and formula
- The basic math symbols used in spreadsheets.
- You can use spreadsheets to make graphs and charts

After the quiz, you will be modifying and building spreadsheets.

[Take the Quiz](#)