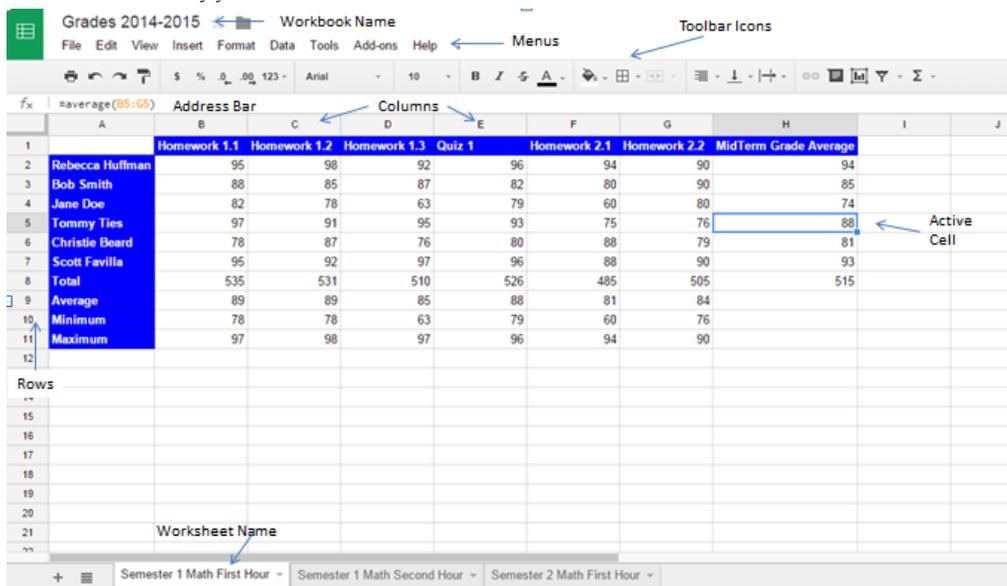


# Google Sheets

## Quick Reference Card

Google Sheets is an online spreadsheet app that lets you create and format spreadsheets and simultaneously work with other people. Here's what you can do with Google Sheets:

- Import and convert Excel, .csv, .txt and .ods formatted data to a Google spreadsheet
- Export Excel, .csv, .txt and .ods formatted data, as well as PDF and HTML files
- Use formula editing to perform calculations on your data, and use formatting make it look the way you'd like
- Chat in real time with others who are editing your spreadsheet
- Create charts with your data
- Embed a spreadsheet — or individual sheets of your spreadsheet — on your blog or website



### Create New Spreadsheet

1. From your drive homepage, click **New** then choose **Google Sheets**
2. A new untitled document will appear in your browser. Click **Untitled Spreadsheet** at the top to rename the document. Now it is ready for editing.

### Autosave

Sheets edited in Google Drive are automatically saved every time changes are made. See when your document was last saved by looking at the save status at the upper right corner of the screen.

### Margins, Page Size, and Orientation

To set these options, click **File > Page setup**. Once you have the perfect settings, you can click **OK** to apply them just to the current document, or click **Save as default** to have these page settings for all future documents.

## The Fundamentals

- The building blocks of a spreadsheet are rows and columns of cells filled with data. Each grid of rows and columns is an individual sheet.
- **Rows** run horizontally and are identified by a number in the row header.
- **Columns** run vertically on a worksheet and each one is identified by a letter in the column header.
- The intersection of a row and a column is called a **Cell**.
- **Cell addresses** are referenced by addresses made from their column letter and row number, such as cell A1, A2, B1, B2, etc. When a cell is selected, the column letter and row number highlight.
- The tab at the bottom of a **worksheet** tells you the name of the worksheet - such as Sheet 1, Sheet 2, etc. Switching between worksheets can be done by clicking on the tab of the sheet you wish to access. Renaming a worksheet makes it easier to keep track of data in large spreadsheet files. You can have up to 256 worksheets in one workbook.
- In a spreadsheet there are three basic types of **data** that can be entered:
  - **Labels** - text with no numerical value.
  - **Constants** - numbers, a constant value.
  - **Math Statements** - formulas or functions used to perform a calculation.

## Navigating a Worksheet

- To select a cell, click a cell or use the keyboard arrow key to move to it.
- The **<TAB>** key takes you one cell to the right.
- The **<Shift> + <TAB>** Key combination takes you one cell to the left.
- To select a cell range (more than one cell), click and drag to select a range of cells, or press and hold the **<SHIFT>** key while using the **<ARROW KEYS>** to move the mouse pointer to the last cell of the range.

## Modifying a Worksheet

- When inserting a row, it will insert a row above or below the current active cell. Choose **Insert > Row Above** or **Row Below**.
- When inserting a column, it will insert a column to the left or right of the current active cell. Choose **Insert > Column to the Left** or **Right**.

## Performing Basic Calculations

In a spreadsheet, calculations are either formulas or functions. A **Formula** is an expression which calculates the value of a cell.

**Functions** are predefined formulas that are readily available.

There are **four steps** in creating a basic formula

1. = (The equal sign is the first thing in the cell, which lets the spreadsheet program know that it will be performing a calculation)
2. First cell reference or number
3. Math Operator
4. Second cell reference or number

A completed formula would look like this:  $=A2+A3 =D7/2$

### Math Operators

- + (plus sign for addition)
- (minus sign for subtraction)
- \* (asterisk for multiplication)
- / (forward slash for division)
- () (parenthesis for grouping)
- ^ (caret for exponentiation)

### Order of Operation

1. Parentheses
2. Exponents
3. Multiplication
4. Division
5. Addition
6. Subtraction

There are **six steps** in creating a function

1. =
2. Function Name
3. (
4. First cell reference in the range
5. :
6. Last cell reference in a range
7. )

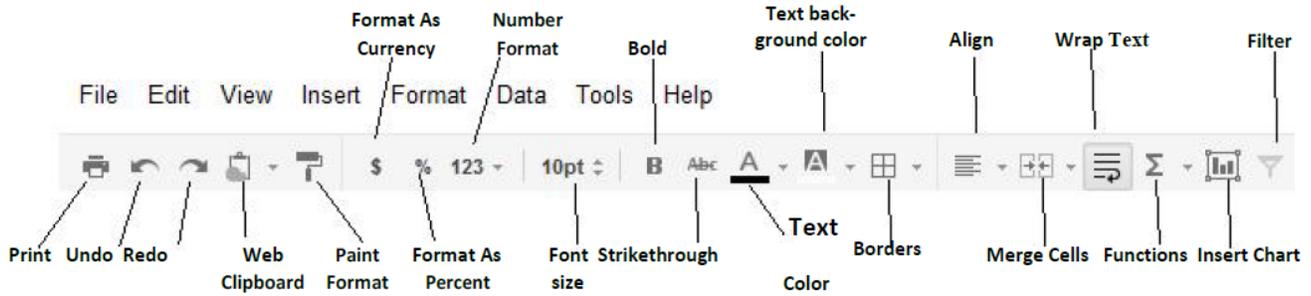
A completed function would look like this:  $=sum(A2:A9)$

### Common Functions

- $=sum$  - adds all number in a range of cells
- $=average$  - returns the average (arithmetic mean) of the numbers provided
- $=min$  - returns the smallest value from the numbers provided
- $=max$  - returns the largest value from the numbers provided
- $=count$  - counts the number of cells that have content in them
- $=concatenate$  - allows you to join 2 or more strings together
- $=if$  - returns one value if a specified condition is true and another if false

# Google Sheets

## Quick Reference Card



### Editing

- **To edit a cell's contents:** Select the cell and click the formula bar or double click on the cell. Edit the cell contents and press enter.
- **To clear a cell's contents:** Select the cell(s) and press the delete key
- **To Cut or Copy data:** Select the cell(s) and choose edit > Cut or Copy
- **To Paste data:** Place the insertion point where you want to paste and choose edit > paste
- **To Paste Special:** Select the destination cell(s), choose edit > paste special. Choices include: paste values only, paste format only, paste all except borders, paste formula only, paste data validation only, paste conditional formatting only, paste transpose
- **To copy using Auto Fill:** Point to the fill handle (bottom right corner of a cell, your cursor will turn into a skinny +), then drag to the destination
- **To Complete a Series using Auto Fill:** Select the cells that define the series. Click and drag the fill handle to complete the series.
- **To move or copy cells using Drag and Drop:** Select the cells you want to move or copy, position the pointer over any border of the selected cell(s), then drag to the destination cells.

### Formatting

- Google Sheets lets you format your data in several different ways so that your spreadsheet and its contents are displayed how you want them. Standard formatting options include font, font size, bold, italics, underline, strikethrough, text alignment, cell alignment, text wrapping and text color.
- **Formatting Numbers** - Google Sheets has several number formats you can choose from for the values in your spreadsheet including number, percent, scientific, financial, currency, date, time, date & time and duration. You can also set how many decimal places your value will have.
- **Conditional Formatting** - Use conditional formatting rules to get a visual summary of complex or changing data. You can format cells to change the text or background colors if they meet certain conditions.

Conditional formatting

Text contains  Format:  Text Color:   Range:  x

Background Color:

[+ Add another rule](#)

**Tip:** To increase the width of a column you can double click on the line between the column labels (A | B) and it will auto size. You can do this trick with rows as well.

To adjust the width and heights for your entire worksheet, click on the blank box to the left of the A column and above row 1. That selects all. Then double click between any two columns or rows.

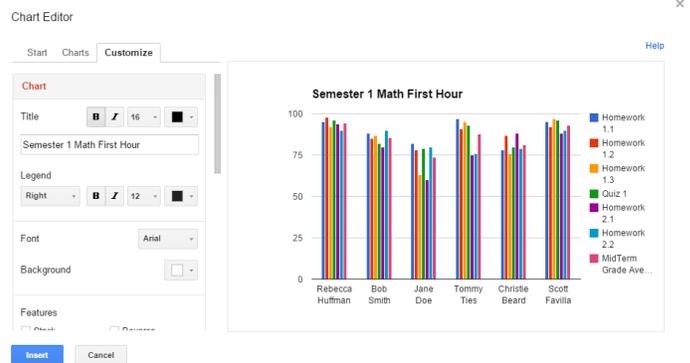
### Charts

You can add a variety of charts and graphs into a spreadsheet, including line, bar and map charts.

#### To Create a Chart:

1. From your spreadsheet, select the cells with data you'd like to include in the chart.
2. Select the Chart icon in the menu bar or choose Insert > Chart. The cart editor box appears.
3. In the Start tab, you're able to edit the range of cells to be included in your chart, select basic layout settings and view recommended charts.
4. If you decide that one of the recommended charts isn't the right thing for your data or if you want to see more chart options, you can either click More >> or move on to the Charts tab.
5. Preview your chart and edit as necessary.
6. Click Insert. The chart appears in your spreadsheet.

**Customize** the look and feel of your chart in the Customize tab. Here, you can add a chart title, axis titles and settings, colors to represent the data in your chart, and some additional chart formatting features.



### Print Options

- When printing your spreadsheets, you have several options to format the printed version of your spreadsheet.
- Print one sheet, all sheets, or a selection in a single worksheet. If you choose to print a selection, the printed selection is the range of cells you selected before opening the 'Print Settings' dialog.
- Adjust the size to Fit to Width or Actual size.
- Choose either **Portrait** or **Landscape** layout.
- Select your **paper size** from the drop down list.
- Check the boxes in the options section to repeat row headers, print without grid-lines, including the document title, include sheet names or include page numbers on your printed copy.

#### Tip:

To keep some of your data in the same place as you scroll through a spreadsheet, for example headings or labels, you can freeze rows or columns.

Select the row you want to stay in place and choose view > Freeze rows or columns.