# Using Microsoft Excel

Spreadsheets are useful tools for quickly calculating, sorting and analyzing data, as well as creating graphs. While this handout focuses on Microsoft Excel, the basics apply to other spreadsheet tools such as Google Spreadsheets and Apple's Numbers programs. I have included reference numbers to mini video-tutorials found on **Atomic Learning** www.atomiclearning.com for specific skills.

*Atomic Learning has great short videos on Excel. Type in keywords, tutorial number, or use the filter to select all videos for that version.*

In addition to searching for keywords, you can also type in number of a tutorial.

## Resizing Columns/Rows to fit content *(28687)*

Position cursor betw columns, doubleclick

Make quick selections of all items within a row/column by clicking on its header

## Auto-Fill *(28657)*

Auto-fill is a great trick to quickly add patterned items.
For example:
- Days of the week, dates, month, times
- Counting by (i.e. 5,10,15,20)
- Calculations and formulas

1. Type the first few items of the pattern
2. Highlight those cells
3. Position your cursor at the bottom-right corner of the last entry and drag across or down to continue the pattern

# Performing Calculations

## Option One: The Sum Symbol Σ *(28659)*

The Sum symbol contains common formulas such as Sum, Average, Maximum, and Minimum.
1. Click in the cell where you'd like the calculation to be
2. Press the Sum button's pull-down triangle on the toolbar.
3. After selecting the desired formula, Excel will highlight the cells where it's getting the tabulations from; if correct, hit Enter. You should now see your calculation.
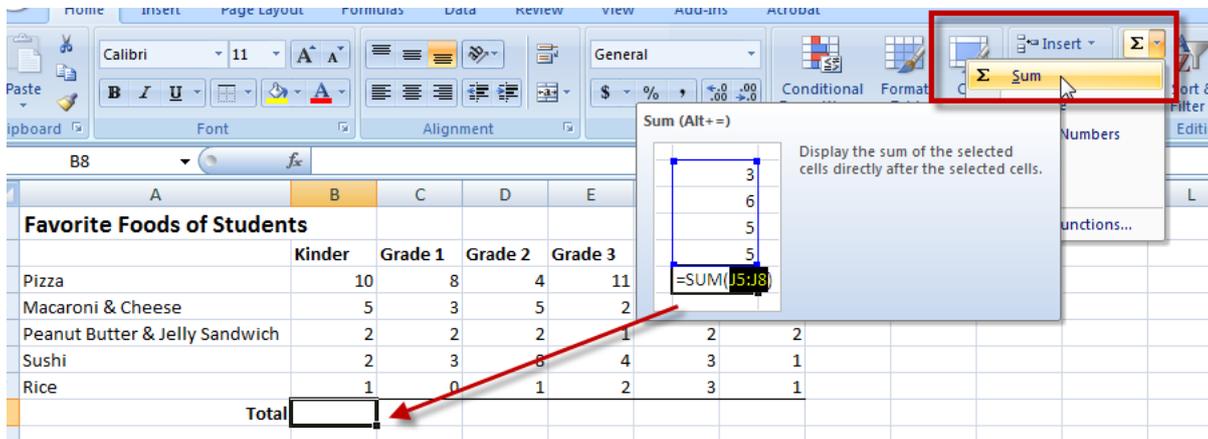


## Option Two: Create your own Formula - Simple arithmetic

1. Click in the cell where you'd like the calculation to be
2. Type the = sign, indicating you are creating a formula
3. Click in the first cell containing the data you are referencing. *(Note: This way, if you change the value, the calculation will reflect that change)*
4. Type the operator (+,-, *,/)
5. Click the second cell containing data and hit Enter. The calculation should now appear

**Rajasthan Trip**

| Hotel | Rate | # nights | Total |
|---|---|---|---|
| Udaipur | 900 | 2 | =(B3*C3) |
| Jaipur | 1,230 | 3 | |
| Jaisalmer | 600 | 2 | |
| Bikaner | 800 | 1 | |

*This example will multiply cell B3 by C3*



Click and drag cell containing formula to apply pattern to the rest of the items

*Tip: If you want to apply the same patterned calculation to subsequent rows/columns, perform the auto-fill function as described on page one.*

## Formatting numbers (Currency, Percentages, etc.) *(28688)*
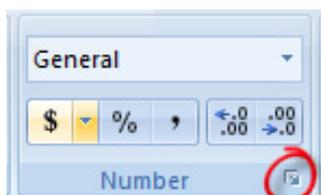


- Go to the **Number** section, found midway on the **Home** tab
- To see more number formats, click on the bottom corner square (circled)
- You can also increase or decrease the number after the decimal point



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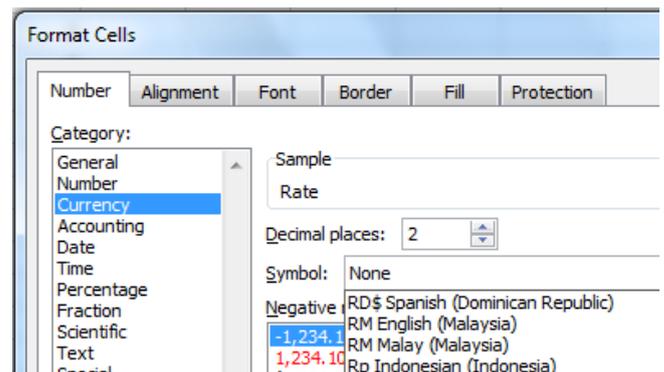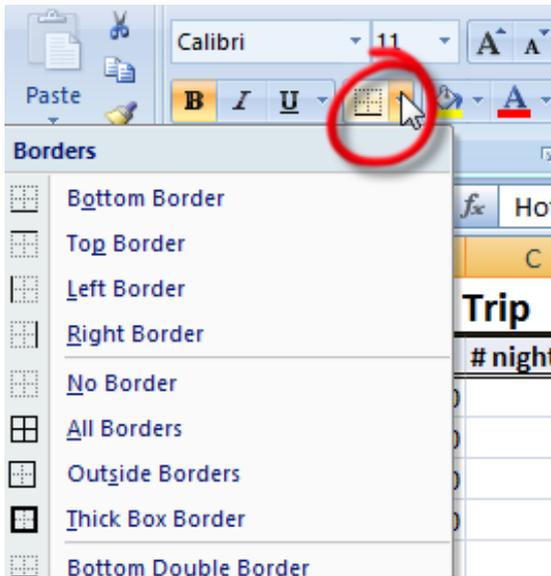
Click on borders pull-down triangle to select desired border for selected cells

## Applying Borders and Fills

1. Select the cell(s) you'd like to format
2. To apply a border, click on the **Border** button's pull-down triangle (circled) and choose the desired style
3. Repeat to apply additional border types
4. Click on the **Paint Bucket** next to the borders button to add a color fill to a cell
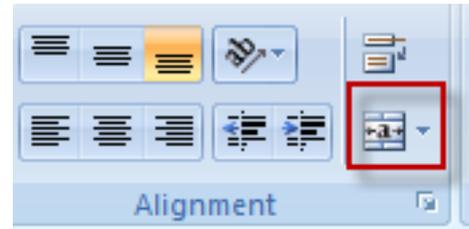


In the **Alignment section**, you can choose how the data will be aligned vertically and horizontally, select the text direction, or merge cells.

## Inserting, Deleting, and Hiding Rows/Columns *(28690-28692)*

1. Click on the row/column heading where you'd like to insert (for example, if I want to add a column between I and J, I'll click on the J column)
2. Click on the **Insert** button, located in the **Cells** section of the **Home** tab
3. To **delete** a row/column, repeat above, this time selecting the Delete button, located directly below Insert
4. To **hide**, right-click a selected row/column and choose Hide.
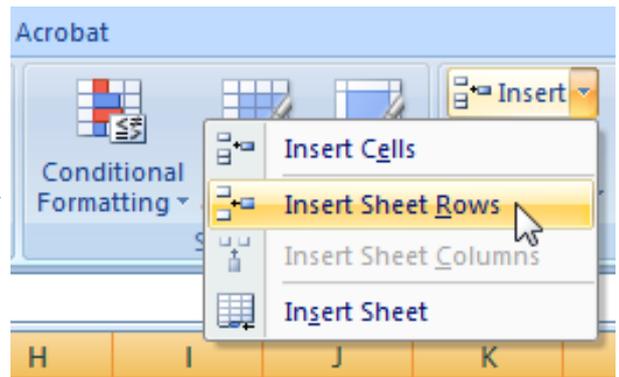




## Sorting Data *(34302)*

1. Highlight the first cell you'd like to sort
2. In the **Editing** section of the **Home** tab, click on the **Sort & Filter** button
3. Select the type of sorting (i.e. A to Z, smallest to largest)

## Filtering Data *(34304)*

1. Repeat steps 1 & 2 above
2. Select the **Filter** option. Small triangles now appear by each column
3. Click on the triangle of the column you'd like to sort
4. You can now apply text filters to show only those items (in this example, only 5A students)





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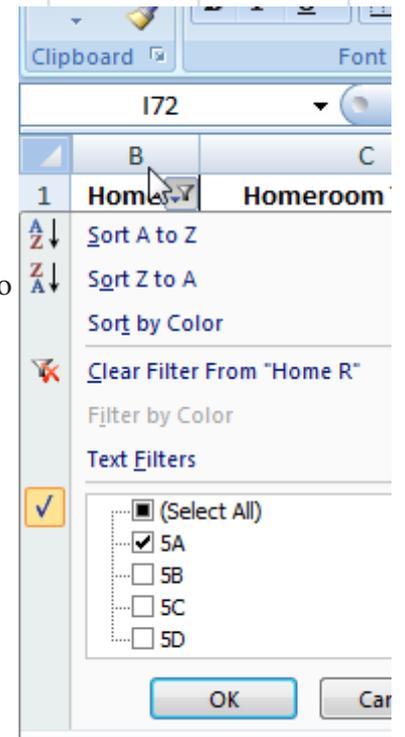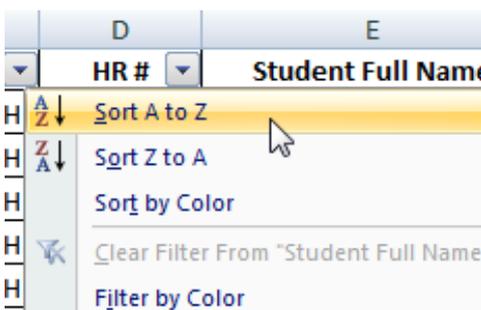
# Creating Charts

First highlight the cells containing the information you'd like to graph *(28886)*

## One-Step Charting *(28888)*

In the **Insert** Tab, click on the desired chart type
Drag the chart to the desired place on the sheet



| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | Temperature of Cities where I've Lived (Celcius) | | | | |
| 2 | | 9-Nov | 10-Nov | 11-Nov | 12-Nov |
| 3 | Chennai | 32 | 30 | 30 | 30 |
| 4 | Bamako | 33 | 35 | 35 | 28 |
| 5 | Belgrade | 19 | 22 | 16 | 16 |
| 6 | Tunis | 24 | 24 | 19 | 18 |
| 7 | Theresa | 19 | 17 | 13 | 7.8 |
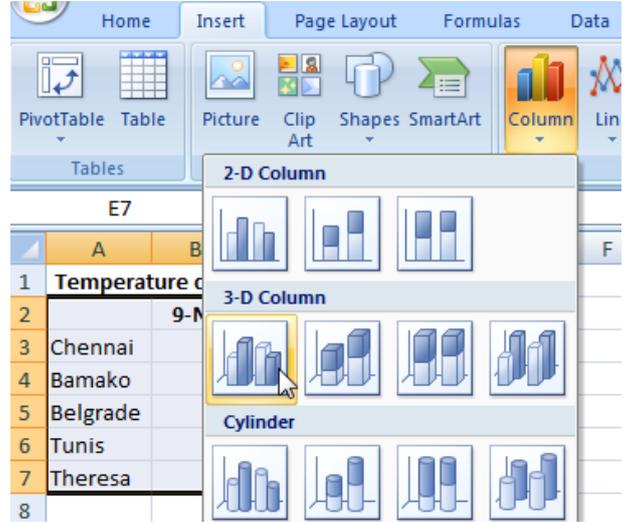
## Adding Titles & Labels *(28900)*

1. Select your chart
2. Click on the **Layout** Tab
3. Here you will find options to add titles for your chart, axis, add labels, and legend options.



Add title and labels



Change layout and color scheme
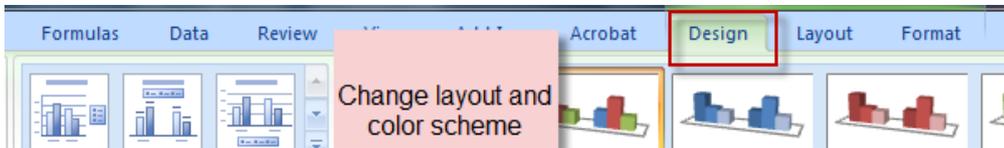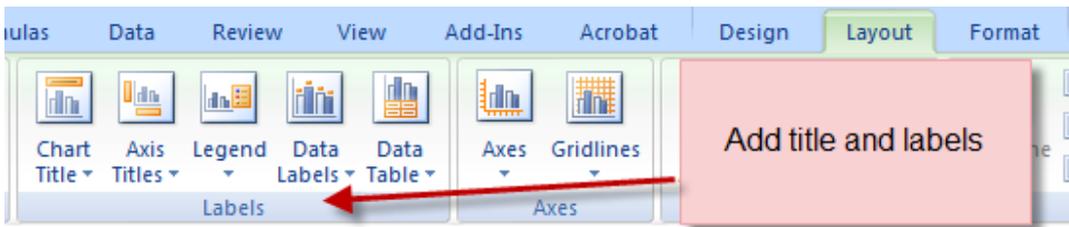
Click the **Design tab** for options including changing the layout of your chart and the color scheme

You can change colors of individual chart items as well - just click on the bar (or pie piece, etc.) and select a different color using the Paint Bucket in the **Home** tab

## Printing *(28717-28720)*

It is always a good idea to do a print preview prior to printing to ensure you are not printing needless pages or have a stray column on a second page.

1. Highlight the cells that you'd like to print
2. In the **Page Layout** Tab, click the **Print Area** button and choose **Set Print Area**. You should now see dotted lines around the content
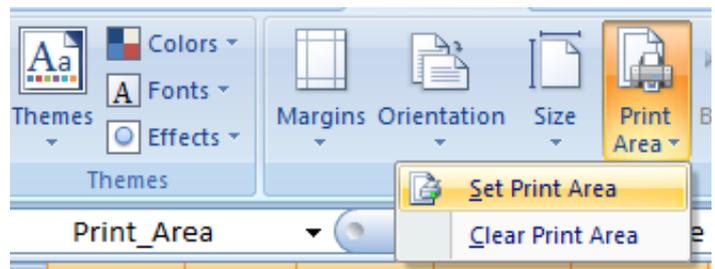


3. Click on the circular **Microsoft Office** button and select **Print Preview**
4. If needed, click **Page Setup** and change the page orientation (landscape/portrait)
5. If your content almost fits on one page, click on the "fit to" and select 1 page(s) option



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