

Spreadsheet Tips and Shortcuts

Programming

item	SS Cell Value	Type This SS Code	SS Displays This	Notes
to enter a cell in an equation		enter the column letter and row number; example B42		
to add or subtract		use + or - symbols		
to multiply		use *		
to divide		use /		
need π ?		=PI()	3.1415927	
need absolute value?	-65	=ABS(C5)	65	
raise a number to a power	7	=C6^2	49	
how to take a square root	2	=SQRT(C7)	1.4142136	
how to take a cube root	27	=C8^0.33 OR =C8^(1/3)	3.00	
need the average (mean) of a range of cells?	see notes	=AVERAGE(C9:C11)	12.633333	C9 = 12.6, C10 = 11.4, C13 = 13.9, C14 & 15 are blank
need its standard deviation?		=STDEV(C9:C11)	1.2503333	
need its standard deviation of the mean?		=STDEV(C9:C11)/SQRT(COUNT(C9:C11))	0.7218803	
need the sum of a range of cells?		=SUM(C9:C11)	37.9	
need how many cells in a range have entries?		=COUNT(C9:C15)	3	Note the empty cells in this range.
making an absolute cell reference	22	=\$C\$16	22	when copied and pasted it always links back to the original cell

Formatting

item	SS Cell Value	Menu Choice OR Code to Type	SS Displays This	Notes
how to round off to display an integer	536.25	Use Number in toolbar or select Format # (⌘1)	536	When the SS window is wide enough the Number option appears in the toolbar and many but not all needed formats can be done there.
how to round off to left of the decimal?	536.25	=ROUND(C20,-2)	540	
how to display commas in a large #	7326	Select Format # (⌘1)	7,326	
how to display a large # in scientific notation?	7326	Select Format # (⌘1)	7.326E+03	

item	SS Cell Value	Menu Choice OR Code to Type	SS Displays This	Notes
how to show subscript or superscript	$x_2 + y_3$	Select the symbol to be formatted, chose Format # (¶1), check the box for the option, hit return	$x^2 + y_3$	for display but not computation
how to display a Greek letter	$\gamma =$	select the English letter and in the Font toolbar type or select Symbol	$\gamma =$	See page 3 of this document

Other Useful Shortcuts

Menu Choice	Function
Alignment Toolbar	This set of clickable choices makes it easy to center, left or right adjust a cell's contents to make your SS look professional. You can also adjust the contents to the top middle or bottom of a cell.
Wrap text in the Alignment Toolbar	Also in this toolbar is the Wrap Text function that keeps text from running into cells left or right. Often the row height (under Format) will need adjustment. After this action. The Shrink to Fit choice will not serve our needs.
Merge in the Alignment Toolbar	In addition here is the Merge menu. In most cases the Merge Across is the best choice for our work. Sometimes you will need to Unmerge Cells to accomplish what you want.

TR's Lab Spreadsheet Rules

- 1 For numbers with units the units must be indicated.
- 2 Units can't occupy the cell with its number or the spreadsheet thinks it is not a number and will not do any computations with it.
- 3 No numbers with the exception of integers are entered in a computational equation. These equations must to link to cells where the number was originally entered or else computed in an earlier step of the process.
- 4 We will start programming our spreadsheets so all needed computed values are in the same column all the way through the spreadsheet when possible.

12.6

11.4

13.9