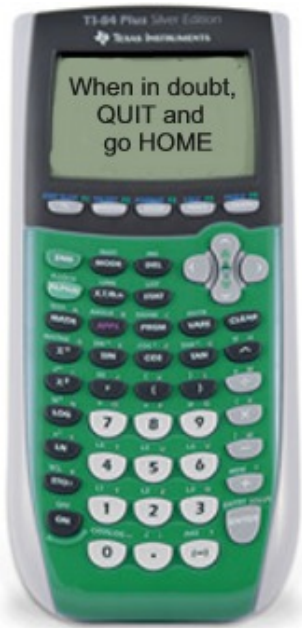


Save This Sheet !

# TI-83+/84+ Quick Reference Sheet

CCSS Algebra 1 Level



**Calculator ID #:**  
Choose 2<sup>nd</sup> MEM,  
#1 About  
ID\*\*\*\*\_\*\*\*\*\_\*\*\*\*

## To Graph Lines (functions):

1. Enter equation in Y=.
2. Use ZOOM #6 (will give standard 10 x 10 window).
3. Use GRAPH to display graph.
4. Use WINDOW (to create your own screen settings).
5. Use TRACE to move spider on graph – arrow up/down between graphs

## To Find Intersection Pts:

1. Graph both equations.
2. Use CALC menu (2<sup>nd</sup> TRACE)  
Choose #5 Intersect
3. Simply press <ENTER> 3 times to reveal the answer.

If you are looking for more than one intersection point, you must repeat this process.

## To Plot Histograms and Box-Whisker Plots:

1. Place data in Lists: STAT → EDIT
2. Set up plot information: STAT PLOT #1 <ENTER>  
Highlight ON, choose symbol for histogram, XList: L<sub>1</sub>  
OR choose symbol for box-whisker, Freq: 1
3. Graph: ZOOM #9 - TRACE to see values on graph
4. Xscl under WINDOW controls width of bars on histogram. An integer value is easiest to read.

**Diagnostics ON:** must be ON to see correlation coefficient, *r*.  
1. MODE – StatDiagnostics: ON  
or 2. CATALOG, ALPHA D,  
DiagnosticOn, ENTER, ENTER

## To Get Statistical Information:

1. Place data in Lists: STAT → EDIT
2. Engage 1-Variable Statistics: STAT → CALC #1 1-VAR STATS
3. On Home Screen indicate list containing the data: 1-VAR STATS L<sub>1</sub>

$\bar{x}$  = mean

$S_x$  = the sample standard deviation

$\sigma_x$  = the population standard deviation

$n$  = the sample size (# of pieces of data)

Q<sub>1</sub> = data at the first quartile

med = data at the median (second quartile)

Q<sub>3</sub> = data at the third quartile

## To Get Scatter Plots and Regressions (Linear, Quadratic, Exponential, Power, etc):

1. Place data in Lists: STAT → EDIT
2. Graph scatter plot: STAT PLOT #1 <ENTER> Choose ON.  
Choose the symbol for scatter plot, choose L<sub>1</sub>, L<sub>2</sub>, choose mark
3. To graph, choose: ZOOM #9
4. To get regression equation: STAT → CALC #4 Lin Reg(ax+b)  
(or whichever regression is needed)
5. On screen: Xlist: L<sub>1</sub> Ylist: L<sub>2</sub> Store RegEQ: Y<sub>1</sub>  
(or LinReg(ax+b) L<sub>1</sub>, L<sub>2</sub>, Y<sub>1</sub>)
6. to see graph – GRAPH

To get Y<sub>1</sub> on the calculator screen: ALPHA F4  
or VARS → Y-VARS  
FUNCTION Y<sub>1</sub>

## To Get Residuals:

After preparing a regression equation (using L<sub>1</sub> and L<sub>2</sub>), residuals are stored in a list called RESID.

To plot residuals:

1. Go to top of L<sub>3</sub>, press ENTER.
2. Go to LIST (2<sup>nd</sup> STAT) – choose #7 RESID, press ENTER.
3. Go to STAT PLOT, Plot 1, ON
4. Type: first icon (scatter plot)
5. XList: L<sub>1</sub> YList: L<sub>3</sub>
6. ZOOM 9:ZoomStat

## Been Playing Games?

Run DEFAULTS to reset calculator. 2<sup>nd</sup> MEM, #7 Reset, #2 Defaults, #2 Reset