Save This Sheet!

TI-83+/84+ Quick Reference Sheet

CCSS Algebra 1 Level



Calculator ID #: Choose 2nd 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 (2nd 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: $STAT \rightarrow EDIT$
- 2. Set up plot information: STAT PLOT #1 <ENTER> Highlight ON, choose symbol for histogram, XList: L₁ 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: $STAT \rightarrow EDIT$
- 2. Engage 1-Variable Statistics: STAT → CALC #1 1-VAR STATS
- 3. On Home Screen indicate list containing the data: 1-VAR STATS L₁

 $\overline{x} = \text{mean}$

 Q_1 = data at the first quartile

Sx = the sample standard deviation

med = data at the median (second quartile)

 σx = the population standard deviation

 Q_3 = data at the third quartile

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

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

- 1. Place data in Lists: $STAT \rightarrow EDIT$
- 2. Graph scatter plot: STAT PLOT #1 <ENTER> Choose ON. Choose the symbol for scatter plot, choose L_1 , L_2 , choose mark
- 3. To graph, choose: ZOOM #9
- 4. To get regression equation: STAT \rightarrow CALC #4 Lin Reg(ax+b)(or whichever regression is needed)
- 5. On screen: Xlist: L₁ Ylist: L₂ Store RegEQ: Y₁ (or LinReg(ax+b) L₁, L₂, Y₁)
- 6. to see graph GRAPH

Been Playing Games?

Run DEFAULTS to reset calculator. 2nd MEM, #7 Reset, #2 Defaults, #2 Reset To get Y_1 on the calculator screen: ALPHA F4 or VARS \rightarrow Y-VARS FUNCTION Y₁

To Get Residuals: After preparing a regression equation (using L_1 and L_2), residuals are stored in a list called RESID. To plot residuals:

- Go to top of L₃, press ENTER.
 Go to LIST (2nd STAT) choose #7 RESID, press ENTER.
- 3. Go to STAT PLOT, Plot 1, ON
- 4. Type: first icon (scatter plot)
- 5. XList: L₁ YList: L₃
- 6. ZOOM 9:ZoomStat

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