

TI-84 Tip Sheet – Calculations

Use   for fraction templates.



for fraction templates.

$$\frac{3}{4} + (2\frac{5}{6})$$

Use   for the absolute value template.


for the absolute value template.

$$|7 - (3^2) * 2| + 4$$

Use   for the summation template.



for the summation template.

$$\sum_{I=1}^{10} (I^2)$$

Use   for the logarithm template.




for the logarithm template.

$$\log_3(8)$$

Use   for the nth root template.

for the nth root template.



$$\sqrt[5]{32}$$


Use    to calculate a combination.

to calculate a combination.

$${}^6 nCr 3$$



Use  to scroll up and highlight a previous entry or answer, press  to paste to the current entry line, and then edit as needed for a new calculation.

Use  to store values into variables. Then calculate an expression with the variables.

calculate an expression with the variables.


$$2 \rightarrow A \quad 3 \rightarrow B \quad -4 \rightarrow C$$

$$B^2 - 4AC$$

Use   for matrix templates.



for matrix templates.

$$\begin{bmatrix} 3 & 4 \\ -2 & 1 \end{bmatrix}^{-1}$$

Use  to change between the Angle mode between Degree and Radian.

to change between the Angle mode between Degree and Radian.

$$\sin(\pi/6)$$

Use   to raise a number to a power.



to raise a number to a power.

$$(-2)^4$$

Use   for calculations with pi.



for calculations with pi.

$$2 * \pi * 10$$

Use   for negative.





for negative.




$$4 - (-2)^2$$

Use   for calculations with the imaginary number i.

for calculations with the imaginary number i.

$$(2+3i)(4-i)$$

Use   to enter a function. On the home screen ( ),

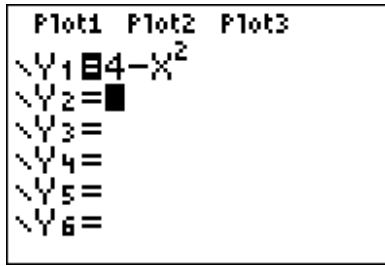
use    to evaluate the function at a given y-value.

to evaluate the function at a given y-value.

$$\sqrt{Y1} @ 4 - X^2 \quad Y1(-3)$$

TI-84 Tip Sheet – Graphing

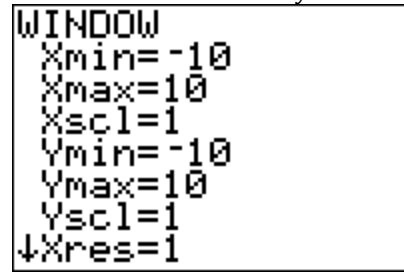
Use **STAT PLOT F1** **Y=** to enter a graph.



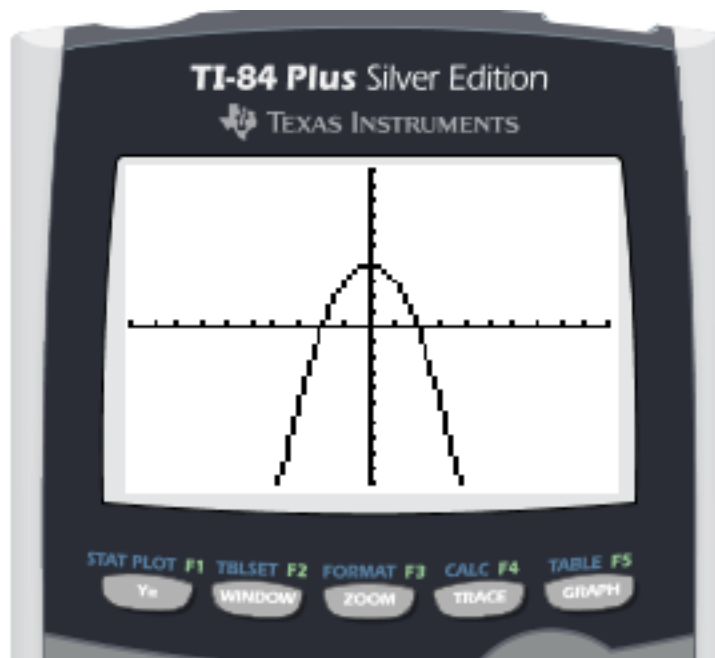
Use **FORMAT F3** **ZOOM** to select an appropriate viewing window.



Use **TBLSET F2** **WINDOW** to set the viewing window manually.



Use **TABLE F5** **GRAPH** to view and analyze the graph.



Use **2ND** **TBLSET F2** **WINDOW** to set up the table.

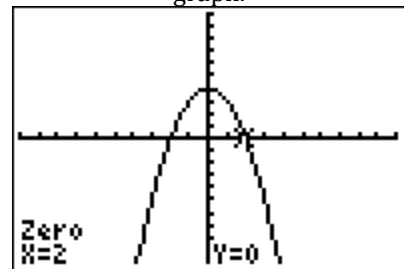


Use **2ND** **TABLE F5** **GRAPH** to view the table.

X	Y1	
0	4	
1	3	
2	0	
3	-5	
4	-12	
5	-21	
6	-32	

Press + for Δ|b|

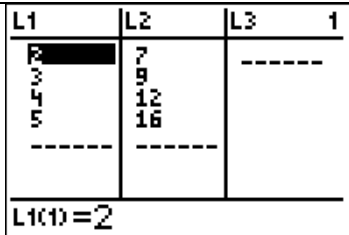
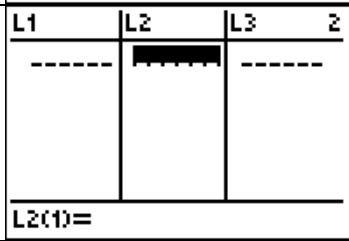
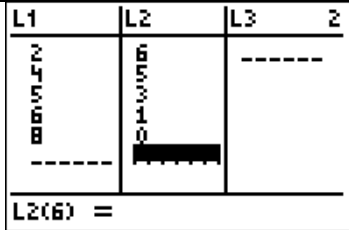
Use **2ND** **CALC F4** **TRACE** to analyze the graph.



TI-84 Tip Sheet – Plotting Data

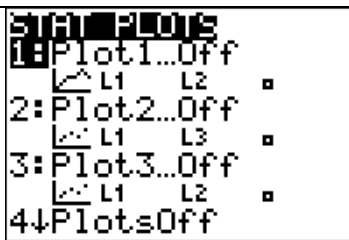

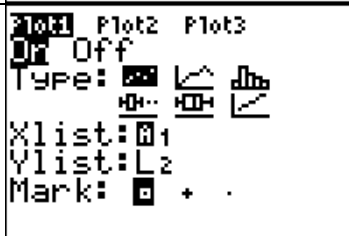
Entering data into lists

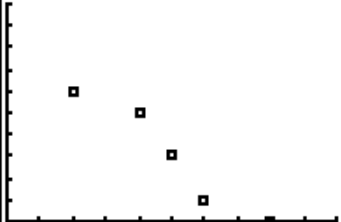
Create L₁ and L₂ from the given information: (2, 6), (4, 5), (5, 3), (6, 1), (8, 0)

<p>STAT ENTER</p> <p>(This command takes you to the statistical editor. If your editor does not currently show L₁, L₂, and L₃, then press STAT 5 to set up the editor. Press STAT ENTER again to re-enter the editor.)</p>	
<p>↑ CLEAR ENTER</p> <p>(if L₁ already contains data)</p> <p>→ ↑ CLEAR ENTER</p> <p>(if L₂ already contains data)</p> <p>← (returns to L₁)</p>	
<p>Enter data in L₁ and L₂ using the numeric keys, ENTER, and the arrow keys to move between lists.</p> <p>2nd MODE</p> <p>(exits data editor and displays whatever is currently on your home screen)</p>	

Plotting data

When you have statistical data stored in lists, you can display the data you have collected in a scatter plot, xyLine, histogram, box plot, or normal probability plot.

<p>2nd Y=</p> <p>(This command takes you to the list of stat plots.)</p> <p>4 ENTER</p> <p>(turns plots off if any plots are on)</p> <p>2nd Y= 1 (Select 1 for plot 1).</p>	
<p>ENTER</p> <p>(turns Plot1 on)</p> <p>↓</p> <p>(Use the left/right arrows and enter to select the type of plot. The first one is a scatter plot.)</p>	
<p>↓ 2nd 1 (enters L₁ as the Xlist)</p> <p>↓ 2nd 2 (enters L₂ as the Ylist)</p> <p>↓ (Use the left/right arrows and enter to select the plotting mark.)</p>	

<p>WINDOW</p> <p>(Use the up/down arrows to enter appropriate values for Xmin, Xmax, Ymin, Ymax.)</p> <p>Alternatively, use FORMAT F3 ZOOM > ZoomStat to set up the viewing window automatically.</p>	<pre>WINDOW Xmin=0 Xmax=10 Xscl=1 Ymin=0 Ymax=10 Yscl=1 ↓Xres=1</pre>	
<p>GRAPH</p> <p>Note: If the calculator graphs another function besides the stat plot, press Y= to CLEAR any functions Y₁ through Y₁₀ that are not empty and then GRAPH again.</p>		

Calculating a Linear Regression Equation

<p>Press STAT then move cursor to CALC then select LinReg(ax+b).</p>	<pre>EDIT [MODE] TESTS 1:1-Var Stats 2:2-Var Stats 3:Med-Med 4:LinReg(ax+b) 5:QuadReg 6:CubicReg 7↓QuartReg</pre>	
<p>Tell the calculator which lists to use to create the linear regression equation and where to paste the equation once it is calculated. Press 2ND L1 Y for L1, 2ND L2 Z for L2, and A-LOCK ALPHA CALC F4 ENTRY/SOLVE ENTER for RegEQ.</p>	<pre>LinReg(ax+b) Xlist:L1 Ylist:L2 FreqList: Store RegEQ:Y1 Calculate</pre>	
<p>If you do not see r², then turn on your diagnostics by pressing QUIT MODE, then ↓ until you reach STATDIAGNOSTICS. Press → ENTRY/SOLVE ENTER CLEAR.</p> <p>Then you can press ↑ on the home screen until you highlight the original command, ENTRY/SOLVE ENTER to paste the command to the current entry line, and ENTRY/SOLVE ENTER to calculate the regression equation again with the diagnostics on.</p>	<pre>LinReg y=ax+b a=-1.1 b=8.5 r²=.9307692308 r=-.9647638212</pre>	
<p>The equation is pasted in the STAT PLOT F3 Y= screen, press TABLE F5 GRAPH to view the line of regression.</p>	<pre>Plot1 Plot2 Plot3 \Y1=.70916633255 583X+278.0520985 2019 \Y2= \Y3= \Y4= \Y5=</pre>	