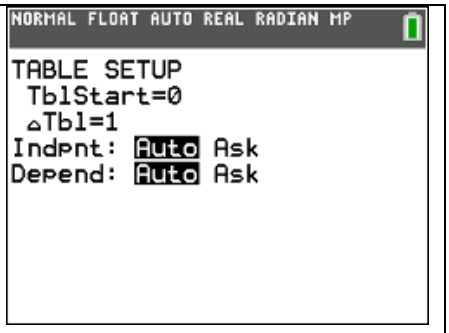
Using Tables on the TI-84+ Graphing Calculator

Default Tables:

Enter one or more functions into **Y=**.

Press **2nd WINDOW** to access **[tblset]**.

Change **TblStart** and the table increment **ΔTbl** if desired.

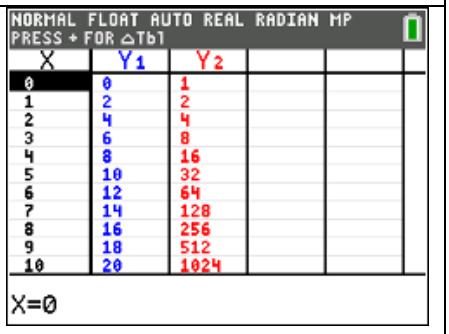


Press **2nd GRAPH** to access **[table]**.

The table of values is displayed for all active functions.

Use the **UP/DOWN arrows** to move through the values and the **RIGHT/LEFT arrows** to change columns.

From this screen, press **PLUS +** to change the table increment, instead of going back to **[tblset]** screen.

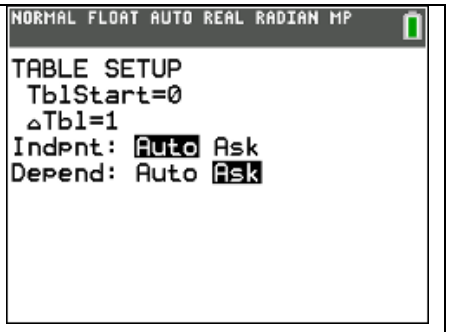


Dynamic Tables option 1:

To view the Y-values one at a time, use AUTO-ASK:

Press **2nd WINDOW** to access **[tblset]**.

Set the Independent variable to AUTO and the Dependent variable to ASK.

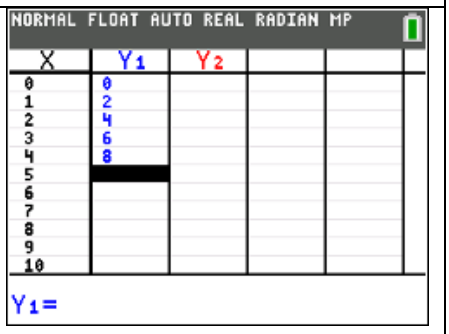


Press **2nd GRAPH** to access **[table]**.

The table of values only displays the X-values initially. Arrow to the desired Y-value column.

Move <u>down</u> the column, pressing **ENTER** to display the value for each row. Repeat for additional columns.

This enables you to observe how a function grows or changes as the X-value increases.

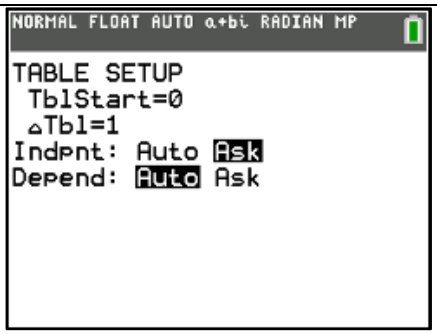


Dynamic Tables option 2:

To enter the X-values one at a time, use ASK-AUTO:

Press **2nd WINDOW** to access **[tblset]**.

Set the Independent variable to ASK and the Dependent variable to AUTO.

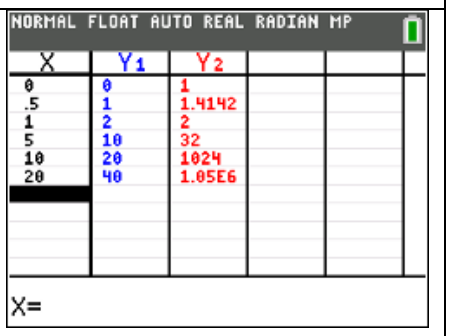


Press **2nd GRAPH** to access **[table]**.

The table of values is blank initially.

As you enter an X-value, the Y-values will fill in for all columns.

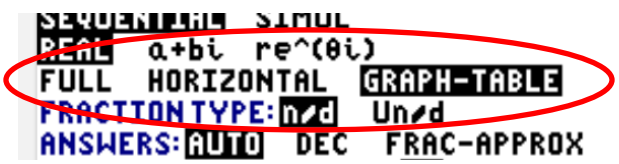
This enables you to set any X-value and compare Y-values for more than one function (which one reaches target value first?), or predict a Y-value for a given X-value (guess the rule scenarios).



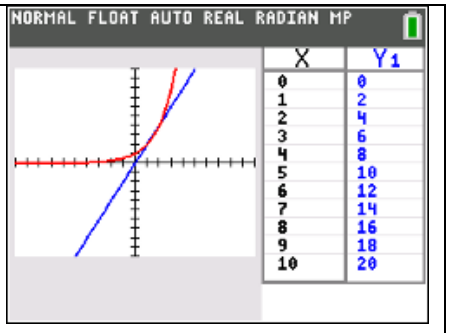
Other Options:

Graph-Table Split Screen

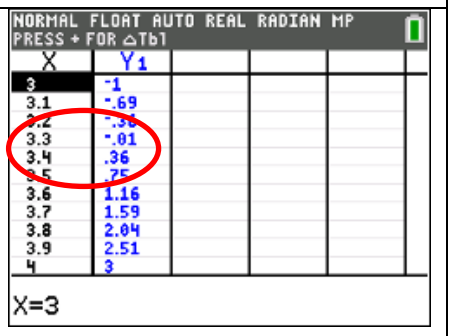
Press **MODE** and choose GRAPH-TABLE



The graph side will be active if TRACE or CALC tools used.
The table side will be active if 2nd GRAPH for TABLE is pressed.



Zooming In with the Table

When examining key points such as intercepts & extrema, identify the interval of X-values containing the key point. Then choose a smaller **ΔTbl** increment, such as .1 or .01.

For $Y = x^2 - 3x - 1$, we observed a sign change in Y-values between x = 3 and x = 4. After "zooming in", we find the X-intercept will be between 3.3 and 3.4 (closer to 3.3).