

Calculator Basics II

- a) Using Lists to display functions defined numerically
- b) Producing scatter plots.

Notation: All words in **BOLD** are calculator function keys.

Using **Lists** to produce tabulated values of the dependent variable x and the independent variable y in the relation $y=f(x)$.

This can be equally done using the **TABLE** function.

Find a problem from text in (table form) or make up your own.

Plot the x and y values given in the given table.

x	f(x)
1	3

Lists

Using Lists to Plot /Graph Functions defined numerically

1. Enter the dependent variable values in a list.

List Edit

Position cursor at **xStat(1)** then type 1 **ENTER**, **ENTER** (Enter The domain of F)

This will establish the list **xStat = { }**

2. Repeat 1 to enter the $y=f(x)$ values in **yStat**.
3. Produce a Plot of the ordered pairs (x,y). This is the graph of the function $y=f(x)$

xSta	yStat	fStat

Go to **STAT PLOT PLOT1**

Set up PLOT1

Using the UP and DOWN cursor keys

Choose **ON ENTER**
 Type **SCAT**
XLIST Name= xStat
XLIST Name= yStat
Mark=+

To produce the plot

GRAPH ZOOM MOORE ZDATA

