Graphing on the TI-89

Before you begin graphing, you will need to clear any functions or variables stored in your calculator.

To Clear Home Screen

(Home if not on home screen) F1 then 8 Clear

To Clear Previously Saved Variables

2nd F6 then Enter Enter

To Clear Previously Saved Functions

Diamond Y= F1 then 8 Enter

To Set Graph Mode

Mode (Graph is highlighted)

→ then 1 (Function)

Enter

To Set Graph Scale

Diamond Graph

F2: Zoom

6: ZoomStd - Usually referred to as the standard viewing window. Sets the x and y axis from -10 to 10. This view is not in proportion as the scale is greater along the x axis.

F2: Zoom

5: ZoomSqr - View is in proportion. The scale is the same on each axis but smaller.

(To view the settings and change as necessary)

Diamond Window

Entering Functions

(Equations must be in slope intercept form y = mx + b)

Diamond Y=

Enter the following equations

(Type only the right side)

$$y1 = 2x + 1$$

 $y2 = -3x + 2$
 $y3 = 3$
 $y4 = \frac{3}{4}x - 3$

(Notice that each equation has a check beside it. Those that are checked will be graphed.)

Graphing Equations

Diamond Graph

(This shows all four graphs)

Selecting Graphs

Diamond Y=

(**F4** toggles the check on or off.)

Highlight y2 and tap F4

Tap **F4** again and the check reappears.

Changing Graph Formats

(2nd F6 changes the style of the graph)

Highlight y1

2nd **F6** then **2** (graph will be dotted)

Highlight y2

2nd F6 then 4 (graph will be thicker)

Highlight y3

2nd **F6** then **7** (area above graph will be shaded)

Highlight y4

2nd F6 then 3 (graph will be heavy line)

To view the graphs **Diamond Graph**