Scatter Diagrams on the TI-89

Before you begin, you should clear all stored functions on your calculator.

> **Diamond Y=**
> **F1: 8 Clear Functions**
> **Enter**

Creating New Folders to Store Data

It's a good idea to create separate folders for your data so you can access it easily later on, plus its easier to delete when you no longer need it. Follow these steps:

From the Home Screen
> **F4 Other**
> **B: New Fold** (or arrow down)
> Key name for folder - **Math**
> **Enter**

Drawing the Scatter Diagram

Let's enter these data points:

x	0	0	5	5	10	10	15	15	20	20	25	25
y	4	6	10	7	12	10	15	17	18	21	23	22

> **Apps**
> **6: Data/Matrix Editor**
> **3: New**   (Use **Open** to retrieve previously saved data)
>   (Use **Current** to continue using the present set of data)

Type: Data (**Arrow Down** to the next line)

Folder: **Arrow Right** then highlight **Math** if its not already showing. Then **Enter** (**Arrow Down** to the next line)

Variable: Type **Example1** (Use a name that will help you remember the problem. Remember no spaces and avoid names that may already be used by the calculator.)
Enter
Enter

Key the x values in c1 (column 1) and the y values in c2 (column 2). Press **Enter** after each entry to move the cursor to the next row, same column.

F2 Plot Setup
F1 Define

Plot Type: **Scatter** (**Arrow Down** to the next line)

Mark: Box (**Arrow Right** to show other marks that can be used when the graph is drawn) (**Arrow Down** to the next line)

x: Key **c1** (meaning the x values are in column 1) (**Arrow Down**)
y: Key **c2** (**Arrow Down**)

Freq and Categories? **No**
Enter

Set the Graphing Window
You can set the viewing window yourself or let the calculator select the minimum and maximum values so that all of the data points will display in the viewing window.

Manually
Diamond Window
x = [-5, 30]   **Pick values that include all of the points in the problem**.
y = [0, 25]
xscl = 5
yscal = 5
Diamond graph
The scatter diagram is displayed.

ZoomData
Diamond Window
F2 Zoom
9 ZoomData   **Calculator will set the viewing window so all data points are displayed.**
The scatter diagram is displayed.