

Appendix

Before starting data collection using the TI-83 Plus, check the following settings.

Checking the *MODE* Settings

The *MODE* settings control how the TI-83 Plus displays and interprets numbers and graphs. The *MODE* should be set to the default setting of the TI-83 Plus. The term *default setting* is calculator terminology that describes a screen where all of the items or functions selected are in the leftmost column.

If the *MODE* setting is not set to the defaults:

1. Press **[MODE]** to display the mode settings.

```
Normal Sci Eng
Float 0123456789
Radian Degree
Func Par Pol Seq
Connecter Dot
Sequential Simul
Real a+bi re^θi
Full Horiz G-T
```

2. Press the down arrow **▼** until the cursor is on the line that does not have the leftmost option highlighted.

```
Normal Sci Eng
Float 0123456789
Radian Degree
Func Par Pol Seq
Connecter Dot
Sequential Simul
Real a+bi re^θi
Full Horiz G-T
```

3. Place the cursor over the leftmost selection on that line and press **[ENTER]**.

4. Continue this process until you have selected all of the options that are in the leftmost column.

The mode is now set to the defaults.

```
Normal Sci Eng
Float 0123456789
Radian Degree
Func Par Pol Seq
Connecter Dot
Sequential Simul
Real a+bi re^θi
Full Horiz G-T
```

Checking the Y= Editor Settings

The screen that is displayed depends on the mode setting. Function mode is the default mode of the TI-83 Plus. The TI-83 Plus can store up to 10 functions to the variables **Y1** through **Y9**, and **Y0**. Check to make sure that there are no functions stored in the Y= Editor.

1. Press $\boxed{Y=}$ to display the Y= Editor.

```

Plot1 Plot2 Plot3
Y1=2X+3
Y2=X^2-2X-3
Y3=X-1
Y4=
Y5=
Y6=
Y7=

```

2. If any functions are stored in the Y= Editor, use the up arrow $\boxed{\uparrow}$ or the down arrow $\boxed{\downarrow}$ to position the cursor on the function and press $\boxed{\text{CLEAR}}$.

```

Plot1 Plot2 Plot3
Y4=
Y5=
Y6=
Y7=
Y8=
Y9=5-X
Y0=X^3

```

3. Make sure you move the cursor down to **Y0** to clear *all* functions.

```

Plot1 Plot2 Plot3
Y4=
Y5=
Y6=
Y7=
Y8=
Y9=
Y0=

```

Checking the WINDOW Settings

The WINDOW sets the viewing rectangle for the function's graph.

1. Press $\boxed{\text{WINDOW}}$ to display the window.

```

WINDOW
Xmin=0
Xmax=1.2
Xscl=.2
Ymin=-4.20966
Ymax=16.38
Yscl=1
Xres=1



```

2. Press $\boxed{\text{ZOOM}}$.

```

ZOOM MEMORY
1:ZBox
2:Zoom In
3:Zoom Out
4:ZDecimal
5:ZSquare
6:ZStandard
7↓ZTrig

```


3. Press the down arrow  to select **6:ZStandard** and press .

Note: The TI-83 Plus displays the coordinate axes after you press  **6:ZStandard**.

```

ZOOM MEMORY
1:ZBox
2:Zoom In
3:Zoom Out
4:ZDecimal
5:ZSquare
6:ZStandard
7↓ZTrig

```

4. Press  to set the window to the standard default setting.





```

WINDOW
Xmin=-10
Xmax=10
Xscl=1
Ymin=-10
Ymax=10
Yscl=1
Xres=1

```

Checking the FORMAT Settings

Make sure the FORMAT menu is set to the defaults. (Refer to the **Checking the MODE Settings** section for an explanation of defaults.)

1. Press   to display the FORMAT window.
2. If the format setting is not set to the defaults, press the down arrow  until the cursor is on the line that does not have the leftmost option highlighted.
3. Place the cursor over the leftmost selection on that line and press .
4. Continue this process until you have selected all of the options that are in the leftmost column.

```

RectGC PolarGC
CoordOn CoordOff
GridOff GridOn
AxesOn AxesOff
LabelOff LabelOn
ExprOn ExprOff

```

Checking the STAT PLOTS Settings

The STAT PLOTS menu controls the way in which data that has been entered in the calculator's statistical lists are plotted and/or displayed. There are several ways to turn all of the plots OFF. This section discusses two of those methods.

Method I

1. Press $\boxed{Y=}$.
2. Check to see if any of the plots are selected.
3. If a plot is selected, press the up arrow $\boxed{\blacktriangle}$ until the cursor is on the selected plot.
4. Press $\boxed{\text{ENTER}}$ to turn the plot OFF.
5. If more than one plot is ON, press $\boxed{\blacktriangleright}$ until the cursor is on the selected plot and press $\boxed{\text{ENTER}}$.

```

Plot1 Plot2 Plot3
/Y 1=
/Y 2=
/Y 3=
/Y 4=
/Y 5=
/Y 6=
/Y 7=

```

```

Plot1 Plot2 Plot3
/Y 1=
/Y 2=
/Y 3=
/Y 4=
/Y 5=
/Y 6=
/Y 7=

```

```

Plot1 Plot2 Plot3
/Y 1=
/Y 2=
/Y 3=
/Y 4=
/Y 5=
/Y 6=
/Y 7=

```

Method II

1. Press $\boxed{2\text{nd}} \boxed{\text{STAT PLOT}}$ to display the STAT PLOTS menu.
2. If any of the plots are ON, select **4:PlotsOff**.

```

STAT PLOTS
1:Plot1...On
  / L1 L2
2:Plot2...On
  / L1 L2
3:Plot3...Off
  / L1 L2
4↓PlotsOff

```

```

STAT PLOTS
1:Plot1...On
  / L1 L2
2:Plot2...On
  / L1 L2
3:Plot3...Off
  / L1 L2
4:PlotsOff

```

3. Press **ENTER**.

```
PlotsOff █
```

4. Press **ENTER** again. The TI-83 Plus screen displays the word Done.

```
PlotsOff Done
```

5. Press **2nd** [STAT PLOT] to display the STAT PLOTS menu. All the plots should read OFF.

```
STAT PLOTS
1:Plot1...Off
  L1 L2
2:Plot2...Off
  L1 L2
3:Plot3...Off
  L1 L2
4↓PlotsOff
```

Using Reset Defaults to Reset the MODE, WINDOW, FORMAT, and STAT PLOTS Settings

The MODE, WINDOW, FORMAT, and STAT PLOTS can be reset to default mode. Resetting the defaults on the TI-83 Plus turns the plots OFF, sets the MODE to default, sets the FORMAT to default, and sets a standard WINDOW. However, resetting the defaults *will not* clear out the functions in the Y= Editor but will turn them OFF.

Use the Reset menu to reset the MODE, WINDOW, FORMAT, and STAT PLOTS:

1. Press **2nd** [MEM].

```
MEMORY
1:About
2:Mem Mgmt/Del...
3:Clear Entries
4:ClrAllLists
5:Archive
6:UnArchive
7↓Reset...
```

2. Press the down arrow **↓** to select **7:Reset**.

```
MEMORY
1:About
2:Mem Mgmt/Del...
3:Clear Entries
4:ClrAllLists
5:Archive
6:UnArchive
7↓Reset...
```

3. Press **ENTER**.

4. Select **2:Defaults** and press **ENTER**.

```

2:1 ARCHIVE ALL
1:All RAM...
2:Defaults...

```

5. Select **2:Reset**.

```

RESET DEFAULTS
1:No
2:Reset

```

6. Press **ENTER**.

```

TI-83 Plus
1.13

Defaults set.

```

7. Press **ENTER**.

```

Done

```

8. Press **CLEAR**. The cursor should be on the Home screen.

If you check the Y= Editor, you will notice that the functions have been turned OFF. Notice that the equal sign is not highlighted.

If you want to turn the functions ON, place the cursor over the equal sign and press **ENTER**.

```

Plot1 Plot2 Plot3
\Y1=
\Y2=
\Y3=
\Y4=
\Y5=
\Y6=
\Y7=

```

For data collection, leave the functions OFF. If you paste a regression equation in a function, **Y**, which already contains an equation, the regression equation will overwrite the existing equation.