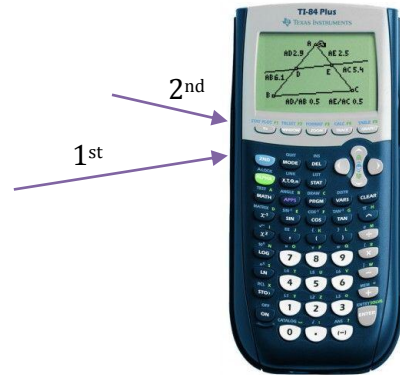


Uses for your TI-84 Calculator:

Box and Whisker Data Plotting on your calculator

1. Press the **2ND** button then **Y=**



2. You should see a screen that looks like this

```

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

3. Press **1** (or **Enter**) to reach this screen

```

Plot1 Plot2 Plot3
On Off
Type: [ ] [ ] [ ]
Xlist:L1
Ylist:L2
Mark: [ ] +
    
```

4. Press **Enter** to turn the plot on, then arrow down to the "Type:" and arrow to the right until you reach the box and whisker plot design

```

Plot1 Plot2 Plot3
On Off
Type: [ ] [ ] [ ]
Xlist:L1
Freq:1
    
```

this one

5. Pressing **2ND** then **MODE** (**QUIT**) will bring you back to your main screen.
6. Push the **STAT** button (which is the last button on the second row from the top, next to the arrows)
7. From this screen, press **1** (or **Enter**) which will now put you into the list section (L1 is List 1, L2 is List 2, etc.)

```

EDIT CALC TESTS
1>Edit
2:SortA(
3:SortD(
4:ClrList
5:SetUPEditor
    
```

L1	L2	L3	1
████████	-----	-----	
L1() =			

8. I used the numbers 72, 73, 66, 71, 82, 85, 95, 85, 86, 89, 91, 92 for my example. I typed the first number onto the calculator, then I scrolled down. I then typed the next number, scrolled down, etc. until all numbers are on their own lines.

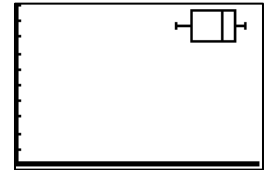
L1	L2	L3	1
72			
73			
66			
71			
82			
85			
95			
L1 = {72, 73, 66, 71...			

9. Then, press the **WINDOW** button to set up the graph dimensions. Since the example doesn't have any negative numbers I don't need to include the negatives in my graph. I, therefore, started my Xmin (X Minimum Value) at 0. My largest number is 95, so I went a little higher to 100 for my Xmax (X Maximum Value). I kept the Xscl (X Scale: the rate we are counting by) as 1. Since we are only working with x values (the range) we don't need to change anything on the Y values except for the Ymin (which I changed to 0).

```

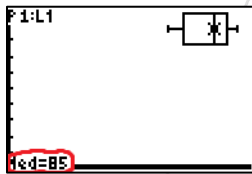
WINDOW
Xmin=0
Xmax=100
Xscl=1
Ymin=0
Ymax=10
Yscl=1
Xres=1
  
```

10. Push the **GRAPH** button, and you should see a screen that has a box and whisker plot

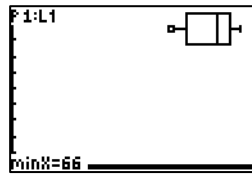


11. From here, find and press the **TRACE** button (right next to the **GRAPH** button).

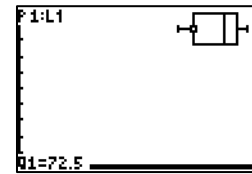
The screen now shows the Median



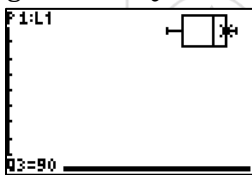
Scroll all of the way to the left to get the Minimum Value



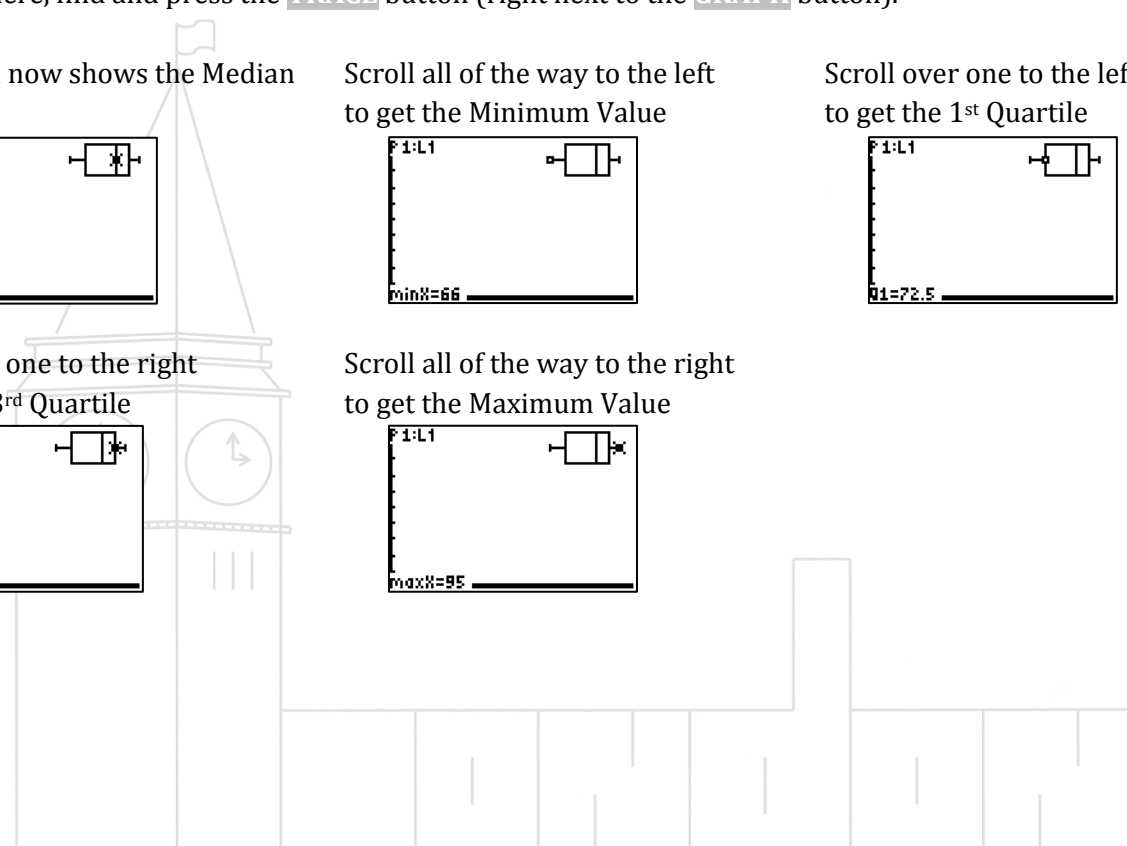
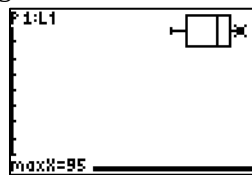
Scroll over one to the left to get the 1st Quartile



Scroll over one to the right to get the 3rd Quartile



Scroll all of the way to the right to get the Maximum Value



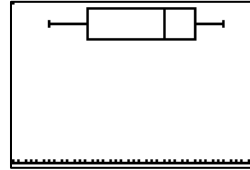
EXTRA INFORMATION for Box and Whisker Data Plot on the TI-84 Calculator

If you do not like the placement of the box and whisker data plot, you can change the sizing by going back to the **WINDOW** area and change the dynamics.

Since, on the example, the smallest number is 66, I put in 60 for my Xmin. I then changed the Ymax to 1, so I could have the screen as zoomed in as possible.

```

WINDOW
Xmin=60
Xmax=100
Xscl=1
Ymin=0
Ymax=1
Yscl=1
Xres=1
    
```



You can get the *mean* of a list of numbers by pressing the **2ND** button then the **STAT (LIST)**.

Scroll to the right until you reach the MATH screen. Either scroll to 3 then press **Enter**, or press the number **3**.

```

NAMES OPS MATH
1: min(
2: max(
3: mean(
4: median(
5: sum(
6: Prod(
7: stdDev(
    
```

```

mean(
    
```

Press **2ND** then **STAT (LIST)** Press **Enter** to enter the first list. Close the Parentheses, then press **Enter**.

```

NAMES OPS MATH
1: L1
2: L2
3: L3
4: L4
5: L5
6: L6
    
```

```

mean(L1)
    
```

```

mean(L1)      82.25
    
```

If you would like the list to be *sorted in numerical order* Press **2ND** then **STAT (LIST)**.

Scroll down to 2 and press enter. Go back to the stat list (**2ND** then **STAT (LIST)**), Press **Enter** to enter the first list

```

2ND CALC TESTS
1: Edit...
2: SortA(
3: SortD(
4: ClrList
5: SetUpEditor
    
```

```

SortA(
    
```

```

SortA(L1)
    
```

Close the Parentheses, then press **Enter**. When you go back to the list, the numbers will now be in order.

```

SortA(L1)      Done
    
```

L1	L2	L3	1
66	-----	-----	
71			
71			
75			
82			
85			
85			
L1()=66			