

## Statistics and Distributions on the TI-83/84

The TI-83/84 family of graphing calculators comes equipped with many statistics functions, from simple computations to complex tests. We will discuss in this handout several distributions commonly used in statistics courses. The steps below are nearly identical across all TI-83's and TI-84's with two exceptions. First, this handout focuses on the TI-83 Plus and higher. If you are using the original TI-83 (without "Plus" in the title) then the keyboard layout is slightly different; you may need to modify the directions on this handout accordingly. Second, the latest update to the TI-84 (currently version 2.55MP) introduced a Statistics Wizard, which greatly simplified the usage of many statistics functions. To find out if your TI-84 has the latest update, press  $\boxed{2\text{nd}} \rightarrow \boxed{+}$  for "MEM"  $\rightarrow \boxed{\text{ENTER}}$  for the "About" screen. The version number will be under "TI-84 Plus". Press  $\boxed{2\text{nd}} \rightarrow \boxed{\text{MODE}}$  for "QUIT" to exit back to the Home screen.

Most of the directions on this handout present a side-by-side comparison between different versions of the TI-83/84 graphing calculator family. Simply follow the screenshots that match your device. Also, the menus shown in the screenshots will differ slightly between the TI-83 and TI-84. For compatibility reasons, most of these screenshots were captured from the TI-83 Plus.

### *Entering and Editing Data in a List*

ALL

We input or edit data in the calculator via the List Editor. Press  $\boxed{\text{STAT}}$  to enter the Statistics menu, then press  $\boxed{\text{ENTER}}$  for "Edit...".

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

We will be using two lists of values for this example and the next two. Enter into the first list ( $L_1$ ) the values 16, 20, 17, 19, 22, 17, 17, 17, 10, and 18 by typing each number and then pressing  $\boxed{\text{ENTER}}$ . That is, 16  $\rightarrow \boxed{\text{ENTER}}$   $\rightarrow$  20  $\rightarrow \boxed{\text{ENTER}}$  ...

Press the  $\boxed{\blacktriangleright}$  key to scroll over to the second list. As with  $L_1$ , enter the values 45, 55, 70, 50, 47, 46, 50, 66, 26, and 60 into  $L_2$ . You should now see the screen on the right. To exit the List Editor, press  $\boxed{2\text{nd}} \rightarrow \boxed{\text{MODE}}$  for "QUIT".

L1	L2	L3	Z
22	47		
17	46		
17	50		
17	66		
10	26		
18	60		
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L2(1) =			