



hp calculators

HP 17bII+ Statistics –
Working with lists

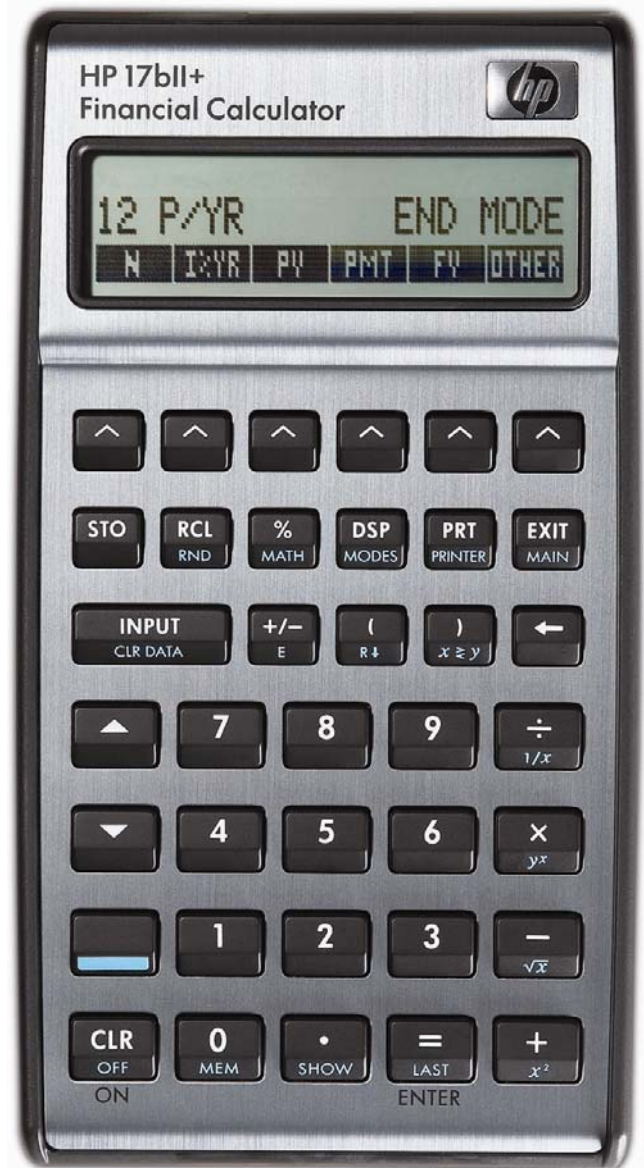
Sum lists

Entering data values

Editing data values

Saving and deleting sum lists

Practice modifying sum lists



Sum lists

On the HP 17bII+, statistics problems are solved in the Sum environment. This is entered from the main menu by pressing .

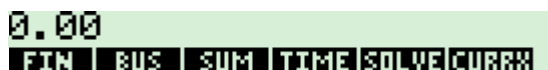










Figure 1











Figure 2

On this screen, the menu keys on the bottom of the display perform these functions:

-  – Ends the entry of statistical data into the sum list and enters the statistics calculation environment.
-  – Creates an empty position in the sum list to allow for the insertion of a data value.
-  – Deletes the currently displayed data value from the sum list.
-  – Allows the present sum list to be saved as a named list in calculator memory.
-  – Used to retrieve a previously named sum list from memory. Or, to start a new list, press  then , if you have already saved the current list.
-  – Displays the total of the data values in the current sum list.

The HP 17bII+ uses a different approach to handling statistics problems than other HP calculators. Rather than storing the data values in registers, the HP 17bII+ stores data values in lists that can be named and saved for future use. This also provides the flexibility to have multiple lists of statistical data stored within the calculator at the same time, limited only by the available calculator memory.

Entering data values

The initial data value is keyed and entered using the  key. The remaining data values are entered in the same manner. Data values can be keyed or computed. They are added to the list when you press  . Note to RPN users: This is an instance where there is a difference between the  and  keys. If you wish to compute a value and add it to a sum list, use  rather than  to serve as ENTER. Pressing  in RPN mode while entering data into a sum list will add the number displayed to the list.



When you have entered all data values, press  followed by  to enter the calculation environment, which appears as shown below. The functions shown below are covered in other learning modules.



Figure 3

Editing data values

As mentioned above, you can insert or delete entries in a sum list.

To delete an entry from the sum list, go to the position in the sum list where the entry to be deleted is displayed and press . This will delete the currently displayed data value entry from the sum list

To insert an entry into the sum list, go to the position in the sum list where the entry is displayed before which you wish to insert a new data value and press . This will create an empty entry in the sum list to allow for the insertion of a data value. For example, if you have a sum list with 5 entries and you wish to insert a new data value between the present data value #2 and #3, you would scroll through the sum list until data value #3 is displayed and then press . This will insert an empty data value entry into position 3 in the list and bump the later data values up one level higher in the sum list.

Saving and deleting sum lists

The HP 17bII+ makes it easy to keep multiple sum lists in the calculator's memory at the same time. A sum list can be given a name and stored for later retrieval. This is done by pressing and then entering a name using the letter keys that are displayed. Once the name is entered, pressing will save the list as a new object in the calculator's memory.

To retrieve a previously saved sum list or create a new list, the function is used. When pressed, the following screen is displayed:

The screenshot shows a green background with the text "SELECT A NAME" in black. Below it, "NEW FIRST" is displayed in white on a black background, indicating it is the selected option.

Figure 4

Pressing will create a new sum list and allow you to begin entering data values. Pressing any of the other names that might be shown will retrieve the sum list for modification or analysis.

To delete a list, first retrieve it from the calculator's memory and make it the current sum list. Then press . The screen will show the prompt displayed in figure 5 below.

The screenshot shows a green background with the text "CLEAR THE LIST?" in black. Below it, "YES" and "NO" are displayed in white on black backgrounds, representing the two options available.

Figure 5

If you wish to keep the list, press . If you wish to clear the list, press . This will clear the sum list entries and leave you with an empty list, but the list name is still stored in calculator memory – it is just an empty list now. If you press , the screen will display the next prompt as shown in figure 6 below. This second prompt allows you to delete the list's name from the calculator. This is useful because there will be times when you want to merely clear a list's entries rather than delete the entire named list. Pressing will clear the list name. Pressing will keep the list in memory but the list will now be empty.

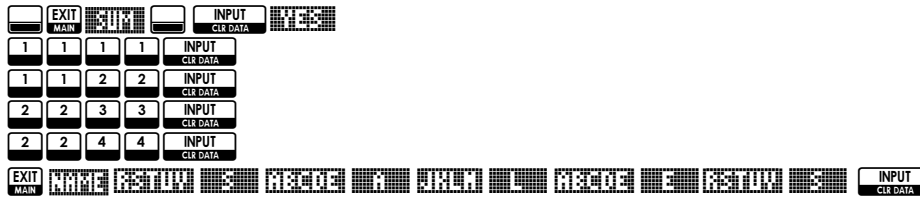
The screenshot shows a green background with the text "ALSO CLEAR LIST NAME?" in black. Below it, "YES" and "NO" are displayed in white on black backgrounds, representing the two options available.

Figure 6

Practice modifying sum lists

Example 1: Create two sum lists for use in later examples. Name the first list "SALES" and the second list "COSTS".

Solution: Create SALES by pressing the keys shown below.



Create COSTS by pressing:



Answer: To verify that both lists have been saved, press **LIST**. The screen should look similar to that shown in figure 7 below. To exit this screen without actually getting a list, press **EXIT MAIN**.



Figure 7

Example 2: Select the SALES sum list and insert a data value of 3355 as data value 5.

Solution: **EXIT MAIN** **LIST** **GET** **SALES** Note: The screen shown in figure 8 below will match what you see only if you do this example immediately after Example 1.



Figure 8

Since we wish to add a data value to the end of the list and since Item(5)=? is the prompt displayed, all that is required is entering the new data value and pressing **INPUT CLR DATA**.



The screen should now appear as shown in figure 9.

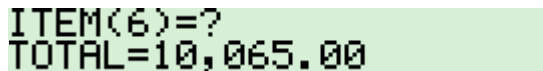


Figure 9

Answer: The list is automatically updated and saved with the additional new data value.

Example 3: Select the project COSTS and add a data value of 300 that occurs between the existing 2nd and 3rd data values.

Solution: **EXIT MAIN** **LIST** **GET** **COSTS**

Note: Use the **↑** and/or **↓** keys to move through the sum list the display looks as shown in figure 10 below.



ITEM(3)=345.00
CALC INSR DELET NAME GET TOTAL

Figure 10



ITEM(4)=345.00
TOTAL=1,458.00

Figure 11

Answer: The list is automatically updated and saved with the additional data value. Note that the previous Item #3 has now become Item #4.

Example 4: Select the project SALES and delete the first data value. Leave all other data values the same.

Solution: 

Note: Use the  key to move through the sum list the display looks as shown in figure 12 below.



ITEM(1)=1,111.00
CALC INSR DELET NAME GET TOTAL

Figure 12



Answer: The sum list is automatically updated and the deleted data value is removed. Note that the 1122 data value is a result of working through Example 2 above.



ITEM(1)=1,122.00
CALC INSR DELET NAME GET TOTAL

Figure 13