

How to Calculate the Standard Deviation on a Calculator

(Casio fx-83GT Plus)

Calculating the Standard Deviation of a list of numbers:

Example: Find the Standard Deviation of the following numbers correct to one decimal place: 3, 5, 6, 8, 10, 13.

Step 1: Press **MODE** and then select **2** for statistics. Now select **1** for “1-VAR”

Step 2: Input the numbers, pressing [=] in between

Step 3: Now press [AC] to clear the table

Step 4: We want to get into the “STAT” function of the calculator – We press [Shift] + [1]

Step 5: This brings up a list of options. Press [4] for “VAR” and [3] for “ σx ”. This is the standard deviation.

In the above example, the answer is 3.3.

Calculating the Standard Deviation from a Frequency Table

Example: The frequency distribution table shows the marks out of five given for a new film by a group of film critics. Use your calculator to find the standard deviation.

Mark	0	1	2	3	4	5
No of Critics	1	3	4	7	4	3

Step 1: Your calculator needs to be set up for handling frequency tables. Press [Shift] and [Setup] (beside the on button). Scroll down to the second screen and press **3** for “STAT”, and **1** for “ON”

Step 2: Press **MODE** and then select **2** for statistics. Now select **1** for “1-VAR”

Step 3: Input the marks from the frequency table, pressing [=] in between

Step 4: Using the up and right arrows, go to the top of the next column in the table, and input the frequencies from the “No of Critics”, pressing [=] in between

Step 5: Now press [AC] to clear the table

Step 6: We want to get into the “STAT” function of the calculator – We press [Shift] + [1]

Step 7: This brings up a list of options. Press [4] for “VAR” and [3] for “ σx ”. This is the standard deviation.

In the above example, the answer is 1.3582322982