

To input the single-variable data $x = \{1, 2, 2, 3, 3, 3, 4, 4, 5\}$, using the FREQ column to specify the number of repeats for each items ($\{x_n; \text{freq}_n\} = \{1;1, 2;2, 3;3, 4;2, 5;1\}$), and calculate the mean and population standard deviation.

SHIFT MODE (SETUP) 3 (STAT) 1 (ON)
 MODE 2 (STAT) 1 (1-VAR)
 1 = 2 = 3 = 4 = 5 = DT DT
 1 = 2 = 3 = 2 = =
 AC SHIFT 1 (STAT) 4 (Var) 2 (\bar{x}) = 3
 AC SHIFT 1 (STAT) 4 (Var) 3 (σ_x) = 1.154700538

Results: Mean: 3 Population Standard Deviation: 1.154700538

Standard Deviation

SD

Use the MODE key to enter the SD Mode when you want to perform statistical calculations using standard deviation.

SD MODE 2

- In the SD Mode and REG Mode, the M+ key operates as the DT key.
- Always start data input with SHIFT CLR 1 (Scl) = to clear statistical memory.
- Input data using the key sequence shown below. <x-data> DT
- Input data is used to calculate values for n , Σx , Σx^2 , \bar{x} , σ_n and σ_{n-1} , which you can recall using the key operations noted nearby.

To recall this type of value:	Perform this key operation:
Σx^2	SHIFT S-SUM 1
Σx	SHIFT S-SUM 2
n	SHIFT S-SUM 3
\bar{x}	SHIFT S-VAR 1
σ_n	SHIFT S-VAR 2
σ_{n-1}	SHIFT S-VAR 3

- **Example:** To calculate σ_{n-1} , σ_n , \bar{x} , n , Σx , and Σx^2 for the following data : 55, 54, 51, 55, 53, 53, 54, 52

In the SD Mode:

SHIFT CLR 1 (Scl) = (Stat clear)

55 DT $n = \text{SD}$ 1.

Each time you press DT to register your input, the number of data input up to that point is indicated on the display (n value).

54 DT 51 DT 55 DT
53 DT DT 54 DT 52 DT

- Sample Standard Deviation (σ_{n-1}) = 1.407885953 SHIFT S-VAR 3 =
- Population Standard Deviation (σ_n) = 1.316956719 SHIFT S-VAR 2 =
- Arithmetic Mean (\bar{x}) = 53.375 SHIFT S-VAR 1 =
- Number of Data (n) = 8 SHIFT S-SUM 3 =
- Sum of Values (Σx) = 427 SHIFT S-SUM 2 =
- Sum of Squares of Values (Σx^2) = 22805 SHIFT S-SUM 1 =

Data Input Precautions

- DT DT inputs the same data twice.
- You can also input multiple entries of the same data using SHIFT ; . To input the data 110 ten times, for example, press 110 SHIFT ; 10 DT .
- You can perform the above key operations in any order, and not necessarily that shown above.
- While inputting data or after inputting data is complete, you can use the ▲ and ▼ keys to scroll through data you have input. If you input multiple entries of the same data using SHIFT ; to specify the data frequency (number of data items) as described above, scrolling through data shows both the data item and a separate screen for the data frequency (Freq).
- You can then edit the displayed data, if you want. Input the new value and then press the = key to replace the old value with the new one. This also means that if you want to perform some other operation (calculation, recall of statistical calculation results, etc.), you should always press the AC key first to exit data display.
- Pressing the DT key instead of = after changing a value on the display registers the value you input as a new data item, and leaves the old value as it is.
- You can delete a data value displayed using ▲ and ▼ by pressing SHIFT CL . Deleting a data value causes all values following it to be shifted up.