Standard Deviation and Mean using Casio fx-83GT CW:

Step 1:

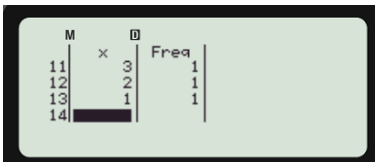
- On the Home screen, press the right arrow to select "Statistics" and press "OK".
- You should now see the screen shown on the right.

Step 2:

- Press "OK" again to select "1-Variable"
- You should now see the screen shown on the right.

Step 3a: For a single list of data: e.g. 2, 3, 1, 2, 3, 2, 4, 1, 2, 4, 3, 2, 1

- Enter the list of data above in the X column by typing in the value and then pressing "EXE" after each entry.
- The frequency values will be set to 1 by default, which is perfect.



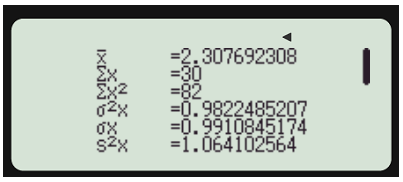
Step 3b: For a frequency distribution: E.g.

X	2	4	6	8	10
F	4	8	3	9	2

- Enter the list of data above in the X column by typing in the value and then pressing "EXE" after each entry.
- Then use the arrows to navigate back to the start of the "Freq" column and enter the numbers from the 2nd row of the table above.

Step 4:

- Then press "OK" and then "OK" again to select "1-Var Results".
- The first figure $\bar{x}$ is the mean of the data i.e. $\bar{x} = 2.3$
- The second last figure σx is the standard deviation i.e. 0.99108



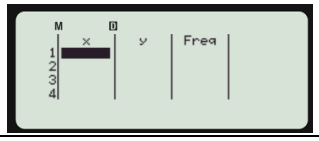
Correlation Coefficient using Casio fx-83GT CW:

Step 1:

- On the Home screen, press the right arrow to select "Statistics" and press "OK".
- You should now see the screen shown on the right.

Step 2:

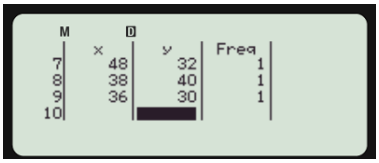
- Press the down arrow and "OK" again to select "2-Variable"
- You should now see the screen shown on the right.



Step 3: For the data below:

Variable 1	35	42	51	38	44	37	48	38	36
Variable 2	31	33	46	32	53	37	32	40	30

- Enter the data from Variable 1 in the X column by typing in the value and then pressing "EXE" after each entry.
- Then go back to the top of the Y column with the arrow buttons and enter the data from Variable 2 in the Y column in the same way.
- The frequency values will be set to 1 by default, which is perfect.



Step 4:

- Then press "OK" and use down arrow to select "Reg Results".
- Press "OK" again to select "y = a + bx" (Linear Regression)
- The value for "r" is the correlation coefficient. i.e. r = 0.4954
- The values of "a" and "b" are for the Line of Best Fit, so the equation of the line of best fit would be: $y = 8.7x + 0.6929$