# **Using the Graphing Calculator to Find Standard Deviation and**

# **Measures of Central Tendency**

ose the following data set to find 3D, median, median, and mode.	

44 Steps	38 to enter data:	59	62	51	56	48	60
1.	Press STAT						
2.	Select EDIT						
	If there is anything in clear the entire colur  • You could als Enter the data into L Delete to remove it.	mn. DO NOT F o go to 2 <sup>nd</sup> + ( 1 (if you make	PRESS DELETE (MEM), and see a mistake, go	while at the to lect 4 to clear to the incorr	op of the list.		
Steps	to calculate:						
2. a. b. 3. ***You ••	Press STAT  Arrow to the right to Make sure that the There should not be Press ENTER or will then find an abu $\bar{x}$ is the mean Sx is the standard de Med is the median If you arrow down you	List says: L1 (e anything in the arrow down for arr	(if not, you can the FreqList at to get to Calcu formation	this point, so late, then pre	if there is, clea	r that out.	t.
What is	s the mean?						
What is	s the standard deviati	ion?					
What is	s the median?						

## What if you were given a huge list with a lot of repeating numbers?

- 1. First clear out the data from the previous problem.
  - a. See step 3 from "steps to enter data"
- 2. Press STAT, then EDIT

14	14	19	19	34	25	25	25	25	26	26	26	26	26
17	17	17	22	22	22	22	22	22	22				

- 3. Instead of typing them all into L1, let's make a frequency table
  - a. Let L1 be the number that appears in the list, and then next to it, in L2, put the number of times that number appears in the list
- 4. Create a frequency table by hand by filling in the table below.

L1	L2

- 5. Now to calculate, press STAT → CALC, press #1 1-Var Stats.
- 6. List should still say L1, but this time the FreqList should say L2 (hit 2<sup>nd</sup> 2)
- 7. Press ENTER or arrow down to get to Calculate, then press ENTER

What is the mean? \_\_\_\_\_ What is the standard deviation? \_\_\_\_\_ What is the median?

### Unit 4 1.3

**Practice:** Find the mean, median, mode and SD of the following data. Use a frequency table if necessary.

1.

17	23	65	94	33	33	8
57	75	44	12	11	68	39

- a. Mean  $(\bar{x}) =$ \_\_\_\_\_\_
- b. Median = \_\_\_\_\_
- c. Mode =
- d. Standard Deviation (Sx) = \_\_\_\_\_
- 2. The following data represents the birth weight of the last 15 babies born at the local hospital.

8.8 11.0 4.7 7.0 7.1 7.0 9.2 6.6 7.4 5.5 5.6 6.2 7.0 10.3 6.2

- a. Mean  $(\bar{x}) =$ \_\_\_\_\_
- b. Median = \_\_\_\_\_
- c. Mode = \_\_\_\_\_
- d. Standard Deviation (Sx) = \_\_\_\_\_
- 3. The following data represents the cost of 10 breakfast cereals at Walmart.

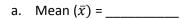
3.64 3.98 3.64 3.28 3.28 2.86 2.93 3.64 3.98 3.12

- a. Mean  $(\bar{x}) =$ \_\_\_\_\_\_
- b. Median = \_\_\_\_\_
- c. Mode = \_\_\_\_\_
- d. Standard Deviation (Sx) = \_\_\_\_\_

### Unit 4 1.3

4. The following data represents the number of games played by 24 American League baseball players.

141	139	139	141	136	135	138	141
136	140	138	139	138	138	140	139
138	137	137	140	136	135	135	141



5. The following data represents the GPAs of 30 students in an honors math class.

4.2	3.8	3.6	4.3	4.0	4.2	3.8	3.7	3.8	3.9
3.9	4.0	4.0	3.7	4.0	3.9	3.9	3.6	4.2	4.1
4.0	3.5	4.2	4.2	3.8	4.0	3.8	3.6	4.1	4.1

a. Mean 
$$(\bar{x}) =$$
\_\_\_\_\_\_