

### Steps for Finding a z Confidence Interval for the Mean (DATA):

1. Enter the data into L<sub>1</sub>
  - a) Go to STAT → Select 1 for Edit → Enter data given into L1.
  - b) Go back to STAT → Move over to CALC → Select 1 for 1Var Stats → Press ENTER Twice
2. Press STAT again → Move cursor to TESTS
3. Select 7 for ZI nterval
4. Move the cursor to DATA → Press ENTER
5. Type in the appropriate values
  - a) On the line for  $\sigma$  → Press VARS for variables
  - b) Select 5 for Statistics
  - c) Select 3 for Sx → Press Enter
  - d) Make sure list is L1
  - e) Freq: 1 (shouldn't need to change)
  - f) C-Level: Type in your percent as a decimal (This is the confidence interval that you are trying to find)
6. Move the cursor to Calculate → Press Enter
  - a) Screen should show:  
ZI nterval  
(Value 1, Value 2)  
 $\bar{x}$  = Value 3  
Sx = Value 4  
n = Value 5  
(Values 1-5 represent numbers)

So your answer will be the confidence interval

$$\text{Value 1} < \mu < \text{Value 2}$$

### Steps for Finding a z Confidence Interval for the Mean (STATISTICS):

1. Press STAT → Move cursor to TESTS
2. Select 7 for ZI nterval
3. Move the cursor to STATS → Press ENTER
4. Type in the appropriate values
  - a) On the line for  $\sigma$ : → Enter value given for the standard deviation
  - b) On the line for  $\bar{x}$ : → Enter value given for the sample mean
  - c) On the line for n: → Enter value given for the sample size
  - d) On the line for C-Level: → Type in your percent as a decimal (This is the confidence interval that you are trying to find)
5. Move the cursor to Calculate → Press Enter
  - a) Screen should show:  
ZI nterval  
(Value 1, Value 2)  
 $\bar{x}$  = Value 3  
n = Value 4  
(Values 1-4 represent numbers)

So your answer will be the confidence interval

$$\text{Value 1} < \mu < \text{Value 2}$$