

**Assignment 1, due September 13 at 3PM**

Assume quiz scores for 10 people (variable X) are: 5, 5, 9, 6, 7, 7, 8, 6, 8, 6.

1. Organize the data – build a table of values, then calculate the frequencies. Express the frequencies in percentages. Calculate cumulative percentages.
2. Find the mean using the frequency distribution to facilitate addition.
3. Find the median using the sorted list; then do it using the cumulative distribution.
4. Find the mode.
5. Find the variation ratio.
6. Find the range.

7. Find the interquartile range using both the sorted list approach and the cumulative distribution approach.

8. Find the standard deviation and the variance.

9. In words, what does the number that you calculated for standard deviation tell us?

10. Calculate  $(X - \bar{X})$  for the third score,  $X=9$ . In words, what does this number mean?