

**ALGEBRA II JOURNAL****Statistics**

1. Statistics is the science of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ information about a set of data.
2. (a) A \_\_\_\_\_ is a statistical graph that looks like a bar graph. Each bar is called a \_\_\_\_\_ and represents \_\_\_\_\_.  
(b) To properly graph & scale a histogram on your calculator, you must set the width of each bar by changing the \_\_\_\_\_ and then scale the graph by changing the \_\_\_\_\_.
3. Truncating a number to the hundreds place means to \_\_\_\_\_.
4. (a) The measures of central tendency measure \_\_\_\_\_ while the measures of variation measure \_\_\_\_\_.  
(b) If the data is centrally distributed, the best measure of central tendency to use is \_\_\_\_\_ while the best measure of variation to use would be \_\_\_\_\_.  
(c) If the data is skewed to one side or scattered, the best measure of central tendency to use is \_\_\_\_\_ while the best measure of variation to use would be \_\_\_\_\_.  
(d) \_\_\_\_\_ is the measure of central tendency most affected by an extreme value while the measure of variation most affected by an extreme value is \_\_\_\_\_.
5. (a) To calculate common statistics in your calculator, you must first enter the data on a \_\_\_\_\_ page and then press \_\_\_\_\_.  
(b) To calculate mode in your calculator, you must \_\_\_\_\_ the column to be \_\_\_\_\_ by \_\_\_\_\_. Then press \_\_\_\_\_.
6. Standard deviation is \_\_\_\_\_.
7. (a) Each individual whisker of a box-and-whisker plot represents \_\_\_\_\_% of the data while the box represents \_\_\_\_\_% of the data.  
(b) A box-and-whisker plot visually displays the \_\_\_\_\_ of the data.
8. A z-score of -1.4 means that an individual scored \_\_\_\_\_  
(above/below) \_\_\_\_\_ the mean.
9. (a) If Melanie scored at the 91<sup>st</sup> percentile on the ACT, that means \_\_\_\_\_.  
(b) If you know an individual's raw score, you can find the corresponding percentile rank by calculating the \_\_\_\_\_ and then finding \_\_\_\_\_.

10. List the following rules, facts, or formulas.

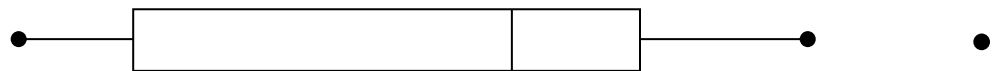
a) Name the 3 measures of central tendency & describe the method for calculating each.

_____	_____	_____
-------	-------	-------

b) Name the 3 measures of variation & describe the method for calculating each.

_____	_____	_____
-------	-------	-------

c) Label each break point and end point with the name of the value used to locate each point.



d) 3 steps for calculating outliers

e) Formula for z-score

f) Draw the normal curve and break it into sections showing the standard percentages. Be sure to label the x-axis!

g) List the 5 sampling methods and describe how each method is performed.