Chapter 8

Analyzing Data Sets for One Variable

Cornell Notes/Summary Sheet

Name: _____

Period: _____

Lesson 8.1 – Big Ideas

- Dot plot
- Data distribution – symmetric, skewed right, skewed left
- Box-and-whisker plot
- Five number summary: minimum, Q1, median, Q3, maximum
- Histogram
- Frequency & bin

Your Notes

Lesson 8.2 – Big Ideas

- Measure of central tendency
- Mean
- Median
- Which measure of central tendency BEST describes the data: mean or median?

Your Notes

Lesson 8.3 – Big Ideas

- Interquartile range, IQR
  IQR measures how far the data is spread out from the median.
- Lower fence
- Upper fence
- Outlier
- How do you use the IQR to identify outliers in a set of data?

Your Notes

Online five number summary: http://www.mathcalcs.com/

Lesson 8.4 – Big Ideas

- Standard deviation
  Measures how far the data is spread out from the mean.
- Interpret the meaning of a smaller standard deviation vs. a larger standard deviation
- Normal distribution
- How can you use the graph of the standard deviation

Your Notes

Stats on the Graphing Calculator

To Get Statistical Information – 5 number summary, mean, etc.

- Place data in Lists: STAT → EDIT
  - Do you have current data in L1?
    - Scroll up, highlight L1, press Clear, Enter
    - Do not use the delete button!
  - Enter the data in L1.
- Engage 1-Variable Statistics:
  - STAT → CALC #1: 1-VAR STATS
    - Go down to calculate and press enter

$\bar{x}$ = mean
Σx = sum of the elements
Σx^2 = sum of the squares of the elements
Sx = sample standard deviation
σx = population standard deviation
n = number of element in the list
min$X$ = minimum value
Q_1 = first quartile
med$x$ = median
Q_3 = third quartile
max$X$ = maximum value