Lesson 12.3 Extra Practice: *Box Plots (Monday, May 11th)*

Helpful Youtube Links

https://www.youtube.com/watch?v=fJZv9YeQ-qQ

Steps to Solve:

Step 1:
Order the data from least to greatest

Step 2:
Record the following information…
- Upper Extreme (largest value)
- Lower Extreme (Smallest value)
- Median
- Upper Quartile
- Lower Quartile

Step 3:
Create a number line displaying all data points, and mark the location of each value that was identified in step 2.

Step 4:
Construct a box surrounding the median by passing through the upper and lower quartiles.

Step 5:
Draw a vertical line through the median value, extending the line to the top and bottom of the box.

Step 6:
Draw a horizontal line connecting the upper quartile to upper extreme and another horizontal line connecting the lower quartile to the lower extreme.

Lesson 12.4 Extra Practice: *Shape of Data Distributions (Tuesday, May 12th)*

Helpful Youtube Links

https://www.khanacademy.org/math/probability/data-distributions-a1/displays-of-distributions/v/shapes-of-distributions

Vocabulary:

Distribution: how data is arranged. Data can be arranged/distributed in many ways. The following vocabulary are ways to describe how data can be distributed.

Ways to describe the Shape of a Distribution (see page 892)

*When describing the shape of a distribution you acknowledge all of the criteria down below:

Cluster: Data that are grouped closely together.

Gap: The numbers that have no data value…OR… large space in the trend of the data.

Peak: The most frequently occurring values or mode.

Symmetric distribution: The left and right side of the distribution look the same.

Measures of Center and Spread (see page 893)

Yes it has symmetric distribution: If the data has symmetric distribution, you will use **mean** (lesson 11.1) to describe the center and **MAD** (mean absolute deviation), refer to Lesson 11.4 for help, to describe the spread.

No the data does not have symmetric distribution: If the data does not have symmetric distribution, you will use the **median** (Lesson 11.2) to describe the center and **IQR** (interquartile range), refer to Lesson 11.3 for help, to describe the spread.

Lesson 12.5 Extra Practice: *Interpret Line Graphs (Wednesday, May 13th)*

Vocabulary:
Line graph: a type of chart that helps you visualize change over time.

X axis: the axis of data the runs left to right on the graph

Y axis: the axis of the data that runs up and down on the graph

Coordinate point: pair of numbers that define its exact location on a two-dimensional plane (x,y)

Steps to Follow:

1. Look at the data chart given. Label the left column of data as (x) and the right column of data as (y).
2. To the right of the chart, re-write the data as a coordinate point.
3. Plot each coordinate point on the graph to the right.
4. Connect the points on the graph with a trending line that shows the growth and dips in the data.