Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sect \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8th grade: Measures of Central Tendencies – Review:

Find the mean, median and mode for each of the following sets:

11, 2, 31, 18, 23, 11, 16

Mean: Median: Mode:

1.2, -2.1, -.4, 9.8, -3.2, -.4, 3.9, 4.5

Mean: Median: Mode:

217, 102, 23, 159, 23, 107, 98, 202, 123

Mean: Median: Mode:

Make Box-and-Whisker Plots for the following sets:

18, 16, 14, 17, 3, 15, 18, 19:

Identify the following:

Median:

Lower quartile:

Upper quartile:

Low sample:

High sample:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

1, 3, 2, 6, 3, 18, 4, 3, 5:

Identify the following:

Median:

Lower quartile:

Upper quartile:

Low sample:

High sample:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Calculate the standard deviation for the following sets:

19, 18, 22, 25, 16

Mean: Standard Deviation:

3, 22, 7, 25, 15, 12

Mean: Standard Deviation:

A number set contains the following numbers: 5, 7, 3, 8, 4, and x.

The mean of the set is 7. What is the value of x?

Calculate the mean of the following set. Identify the outlier, and then re-calculate without the outlier.

211, 198, 217, 30, 199, 180

Mean:

Outlier:

Mean w/o outlier:

The following chart shows the price of Fidget Spinners at various stores around town. Use the chart to determine the mean, median, and mode:

 x

 x x

 x x x

 x x x x

 x x x x x x x

x x x x x x x x

$2 $3 $4 $5 $6 $7 $8 $9 $10 $11

The box and whisker plot below shows daily temperatures in New Orleans, LA and Indianapolis, IN. Use this graph to answer the questions below.

 

Which town has the higher median temperature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which town has a larger interquartile range? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If you were a weather reporter who had to predict daily temperatures, in which city would it be easier to predict? Why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Sammy has allergies that react when the temperature is greater than 69 degrees. Using the box-and-whisker chart, What percentage of days are below 69 degrees in New Orleans? What percentage are below 69 in Indianapolis? What city would be better to live in if Sammy wants to minimize his allergy attacks? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Thora has $12 and she wants to buy a DVD. The DVD Depot sells DVDs with a mean price of $17 and a standard deviation of 8.5. Movie Warehouse sells DVDs with a mean price of $15 and a standard deviation of 1.8.

Which store should Thora go to if she wants the best chance of finding a DVD for less than $12? Explain.