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Given only the three displays from You Try 1, answer the following using complete sentences.

- 1) What is the mean and mean absolute deviation of the data?

- 2) What is the interquartile range?

- 3) Do these displays clearly skew left, skew right, or show symmetry? If any are different explaining their differences.

- 4) What conclu

Sample Answers to the Sample Data only! Students' answers will vary based on their data.

Given only the three displays from You Try 1, answer the following using complete sentences.

- 1) What is the mean and mean absolute deviation of the data?

The mean is $3\frac{1}{3}$ and the mean absolute deviation is $1\frac{5}{9}$.

- 2) What is the interquartile range?

The interquartile range is 3.

- 3) Do these displays clearly skew left, skew right, or show symmetry? If any are different explaining their differences.

The displays seem ever so slightly skewed left. One might argue that they are mildly symmetric.

- 4) What conclusions can be drawn because of the length of the whiskers on the box plot?

Both whiskers seem to be about the same size which show that the data is evenly spread on each side of the interquartile range.

- 5) What conclusions can be drawn because of the location of the median on the box plot?

The median is not located in the middle of the box, it is slightly left of center. Therefore the data does not seem symmetric.

- 6) Does this seem like a large enough sample size to make reliable conclusions about the distribution of numbers rolled using one die?

The data seems to be close to what one would expect. However, it would be a more accurate and reliable representation if the die was rolled more times.

- 7)

Sample Results from 8th grade class: 58, 63, 68, 66, 59, 67, 62, 63, 60, 72, 60, and 63

- 1) What is the difference between the medians of the two data sets?
- 2) What is the difference between the ranges of the two sets of data?
- 3) What is the difference between the interquartile ranges of the two sets of data?
- 4) Describe how the data is skewed or symmetric for each sample.
- 5) What conclusions can be made about the heights of 6th graders versus 8th graders based on these box plots?

Sample Data

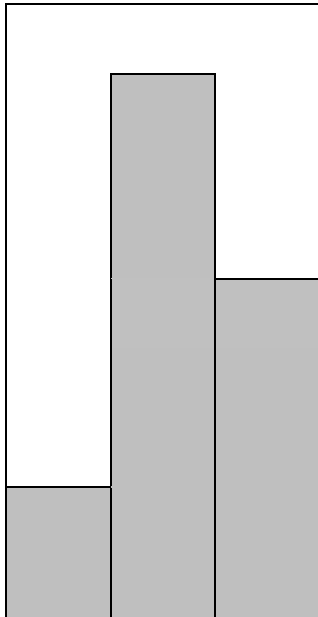
First set of data: 1, 1, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 4, 4, and 4.

Second set of data: 1, 1, 1, 2, 2, 3, 3, 3, 4, 4, 5, 5, 6, 6, and 6.

Sample Data

First set of data: 2, 4, 5, 5, 6, 6, 7, 7, 7, 8, 9, 9, 10, 10, and 12.

Second set of data: 4, 4, 5, 5, 6, 6, 7, 7, 7, 8, 8, 9, 9, 11, and 12.



Sample Answers to the Sample Data only! Students' answers will vary based on their data.

1) Compare the skew or symmetry of the two histograms.

Based on the histograms, the data seems mildly symmetric. Possibly slightly skewed right. However the intervals are misleading because it isn't possible to roll a 1 with two dice.

2) What conclusions can be made about the 1st 15 rolls versus the 2nd 15 rolls based on these histograms?

Based on the histograms, the results seem very similar. All 12 T.0.2 653.47 Tm0 g 0.201 Tcft567.

Displays each set of data as a dot or an x over a number line.

Summarizes data over a number line, showing distribution and spread.

Separates data into four parts. Even though they may differ in length, each part or quartile is 25% of the data.

The box shows the middle 50% of the data, the interquartile range.

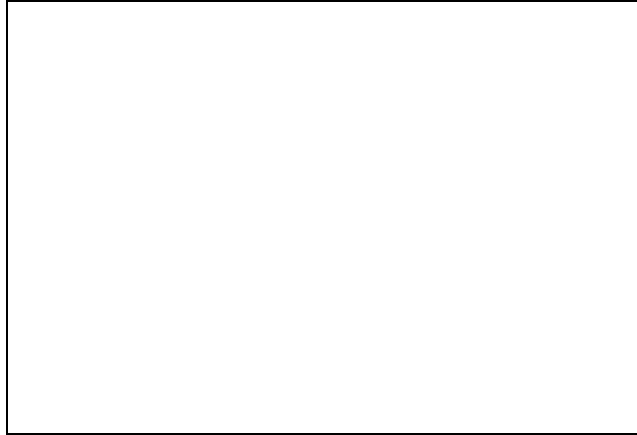
The median does not always split the box in half because the data may be clustered toward one of the quartiles.

Short whiskers indicate concentrated data in the first or fourth quartiles.

Long whiskers indicate that

Grade 6:

The cost in dollars of a cheeseburger at 8 different restaurants is displayed on a dot plot below.



Based on the dot plot above, indicate whether the following are True or False.

e is 2.

157.20 66.744 61.()6()6()-13()6()6()-13()6()6()6()-13

Answer Key to Warm Up Above

Grade 7:

Warm-Up Answer Key

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