Bellwork Alg 2B Friday, April 27, 2017

1. Use the two sets of data below.

Set A: $68, 57, 59, 66, 65, 63, 66, 58, 59, 64, 65$ Set B: $113, 108, 112, 116, 114, 119, 112, 113, 119, 109$

a) Which set of data has more variation? Give a reason for your answer.

b) What is the range for Set A?

c) What is the Interquartile Range for Set B?

Use this set of test scores for 2 - 6. Round answers to the nearest tenth.

$66, 67, 70, 71, 75, 75, 76, 80, 81, 81, 82, 84, 85, 86, 90, 91, 92, 95, 98, 100, 101$

2. Find the mean and Standard Deviation of this set of data.

$\overline{x} =$ $\sigma =$

3. Using the mean and standard deviation of this data set what range of values would be within one standard deviation of the mean?

4. How many of the data values are within one standard deviation of the mean?

5. What percent of data is within one standard deviation of the mean?

6. Draw a histogram of this data using the intervals 60-69, 70-79, 80-89, 90-99, 100-109

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Answers

1. Use the two sets of data below.

Set A: 68, 57, 59, 66, 65, 63, 66, 58, 59, 64, 65

$\bar{x} = 62.73$ $\sigma = 3.62$

Set B: 113, 108, 112, 116, 114, 119, 112, 113, 119, 109

$\bar{x} = 113.5$ $\sigma = 3.5$

a) Which set of data has more variation? Give a reason for your answer.

SET A Because it has a greater Standard Deviation(σ).

b) What is the range for Set A? $68 - 57 =$ (11)

c) What is the Interquartile Range for Set B? $116 - 112 =$ (4)

Use this set of test scores for 2 - 6. Round answers to the nearest tenth.

66, 67, 70, 71, 75, 75, 76, 80, 81, 81, 82, 84, 85, 86, 90, 91, 92, 95, 98, 100, 101

2. Find the mean and Standard Deviation of this set of data.

$\bar{x} =$ 83.1 $\sigma =$ 10.3

3. Using the mean and standard deviation of this data set what range of values would be within one standard deviation of the mean?

$83.1 - 10.3$ TO $83.1 + 10.3$

72.8 TO 93.4

4. How many of the data values are within one standard deviation of the mean? 13

5. What percent of data is within one standard deviation of the mean? $\frac{13}{21} =$ 61.9%

6. Draw a histogram of this data using the intervals 60-69, 70-79, 80-89, 90-99, 100-109