

Name _____ Central Tendencies and Skewness 8-17-17

Directions: Use the following data sets to answer the following questions #1-14

Data Set 1: {2,4,4,9,12,13} Data Set 2 {3,3,3,4,5,7,8} Data Set 3 {8,8,8,9,9,10,10,10,15}

Data Set 4 {4,4,4,5,6,7,8,8,9,9,10,10,11,11,12} Data Set 5 {2,5,7,9,12,13,18,19,29,72,100} Data List 6 (1,2,2,3,3,3,4,4,5)

1. Determine each of the following for data list 1 Mode _____ Median _____ Mean _____
2. Determine each of the following for data list 2 Mode _____ Median _____ Mean _____
3. Determine each of the following for data list 3 Mode _____ Median _____ Mean _____
4. Determine each of the following for data list 4 Mode _____ Median _____ Mean _____
5. Determine each of the following for data list 5 Mode _____ Median _____ Mean _____
6. Determine each of the following for data list 6 Mode _____ Median _____ Mean _____

SKEWNESS AND SYMMETRY

- A data set is said to be positively skewed IF the mean is greater than the median
 - A data set is said to be negatively skewed IF the mean is less than the median
 - A data set is said to be symmetric IF mean, mode, and median are equal. (typically the data set will have exactly one mode)
7. Which data lists are positively skewed? _____
 8. Which data lists are negatively skewed? _____
 9. Which data lists are symmetric? _____
 10. Which data lists had a median that was one of the numbers in the list? _____
 11. Which data lists had no mode? _____
 12. Which data lists had multiple modes? _____

Directions: Use the following numbers in data list 7 {1,2,4,5,6,7,7,8,9,10} to answer the questions 24 and 25

13. What number can you add to the data list 7 to get a mean of 6?
14. Assuming that you start with the original data list 7, what number can you add to the list to get a median of 6?

15. Explain step by step how to create a list on TI Nspire

16. Explain step by step how to create a DOT plot on a TI Nspire