

STATISTICS UNIT STUDY GUIDE

Solve each of the problems below. These represent the types of questions on your test. Be sure to ask questions if you need more help with a topic.

I CAN RECOGNIZE A STATISTICAL QUESTION.

6.SP.1

Mark each question as statistical or not. If it is not, rewrite the question to make it statistical.

1. What is the favorite restaurant of the students in my school?

2. What size shoes do you wear?

3. How many books have the students in my class read this month?

4. How fast can a sixth grader run a mile?

5. How many times do you go to PE each week?

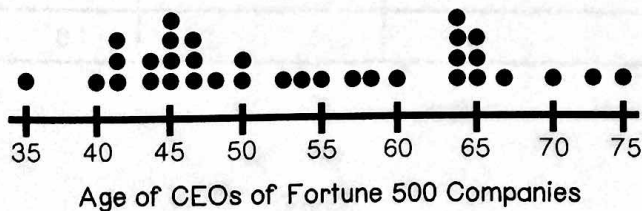
6. What is your favorite type of food?

I CAN DESCRIBE A DATA DISTRIBUTION.

6.SP.2

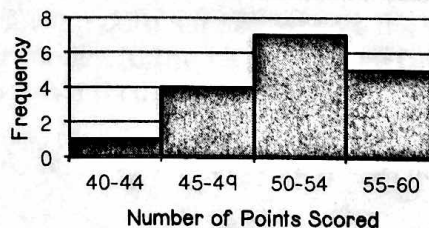
Describe the overall shape, spread, and center of each graph below.

7.



8.

Basketball Points



I CAN FIND THE MEASURE OF CENTER.**6.SP.3**

9. The following data set represents the number of dollars twenty customers withdrew at an ATM.

| | | | | | | | |
|-------------------|----|----|----|----|-----|-----|-----|
| Number of Dollars | 20 | 40 | 60 | 80 | 100 | 120 | 140 |
| Frequency | 10 | 5 | 2 | 1 | 2 | 0 | 0 |

Mean: _____ Median: _____

10. The following data set represents the average high monthly temperature in Denver, CO.

44, 46, 54, 61, 71, 81, 88, 86, 77, 65, 52, 43

Mean: _____ Median: _____

I CAN FIND THE MEASURE OF VARIABILITY.**6.SP.3**

12. The following data set represents the number of siblings of six students in music class.

| NUMBER OF SIBLINGS | DEVIATION FROM MEAN | ABSOLUTE DEVIATION FROM MEAN |
|--------------------|---------------------|------------------------------|
| 3 | | |
| 2 | | |
| 4 | | |
| 2 | | |
| 1 | | |
| 0 | | |

Mean: _____ MAD: _____

13. The following data set represents the number of students in the Monday swim classes.

8, 6, 4, 3, 8, 9, 6, 5, 2, 8

Q1: _____ Q3: _____ IQR: _____

14. The following data set represents the cost of an order (rounded to the nearest dollar) in the Chick-fil-a drive thru.

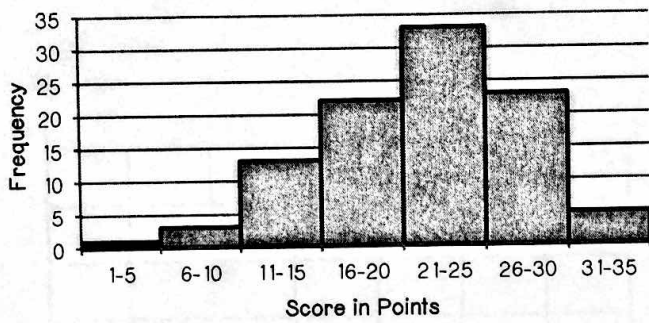
10, 21, 34, 12, 6, 3, 14, 18, 22, 29, 9, 2, 15, 12, 18

Q1: _____ Q3: _____ IQR: _____

I CAN SUMMARIZE DATA SETS.

15. Use the data below to answer the questions.

ACT Scores

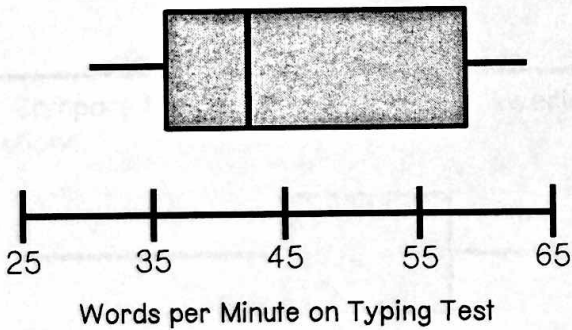


A. How many ACT scores were included in the data?

B. Which measure of center is appropriate for this data? Why?

C. Estimate the mean of the data. Which interval would it fall within?

16. Use the data below to answer the questions.

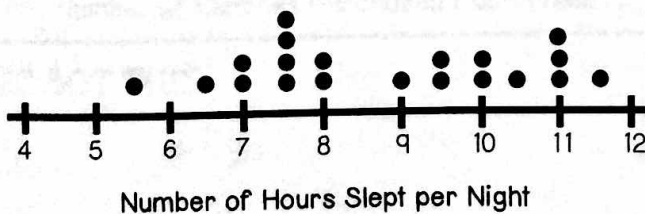


A. Estimate the minimum and maximum number of words typed.

B. What measure of variability is appropriate for this data? Why?

C. Estimate the IQR of the data.

17. Use the data below to answer the questions.



A. Describe the patterns in the data.

B. Determine the mean number of hours slept each night.

C. Determine the median number of hours slept each night.

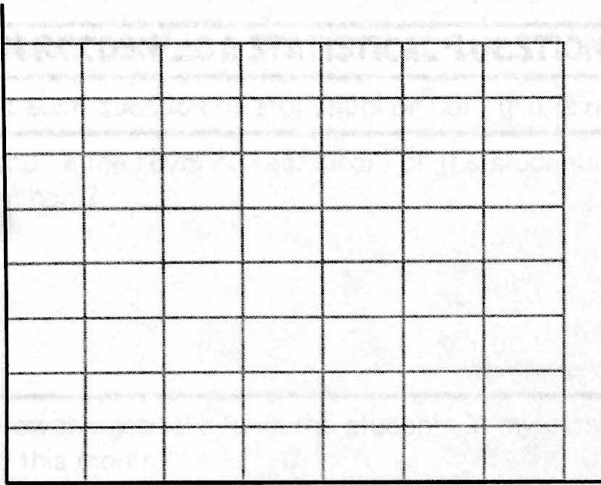
D. How do the mean and median differ?

I CAN DISPLAY DATA ON DOT PLOTS, HISTOGRAMS, AND BOX PLOTS.

6.SP.4

18. Use the list of scores below to create a histogram displaying the grade students received on their science fair project.

66, 89, 93, 81, 72, 78, 70, 55, 96, 84, 94, 92, 81, 86, 79



19. The following data set represents the number of hours students spend on their science fair project. Create a five-number summary and box plot to display the data.

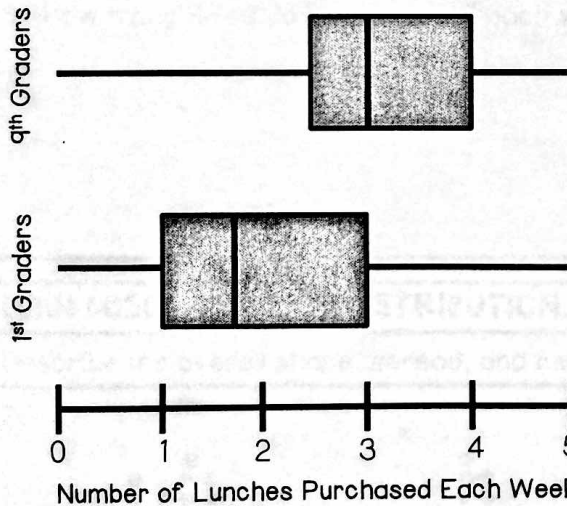
8, 4, 14, 12, 5, 11, 8, 9, 7, 9

Min: _____ Q1: _____ Med: _____

Q3: _____ Max: _____



20. Compare the box plots below by answering the questions.



A. How did the minimum and maximum scores compare?

B. What conclusions can you draw about the number of lunches purchased each week?

C. Describe how the IQR varies from 1st to 9th grade.

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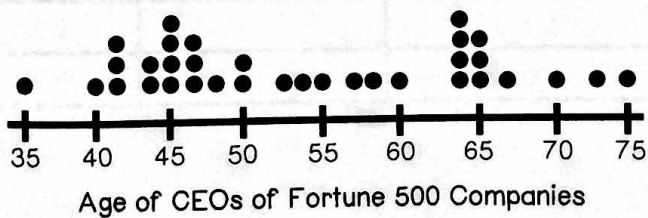
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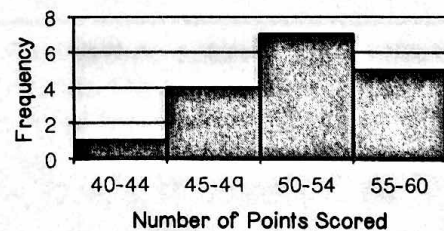
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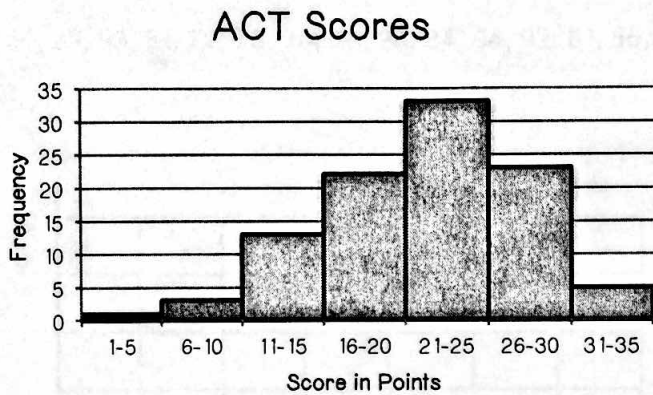
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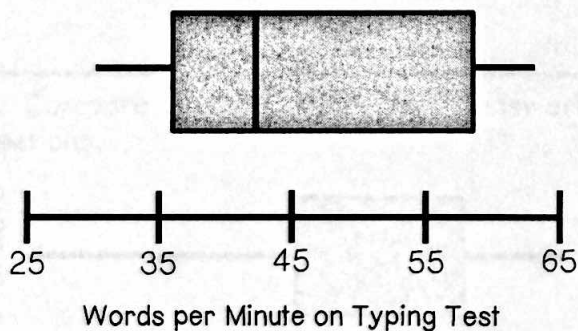


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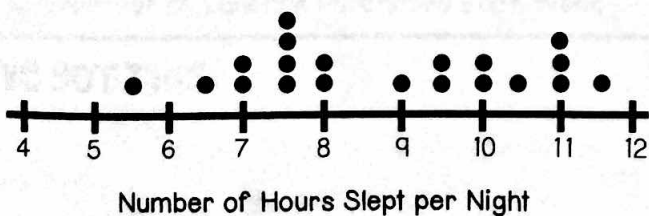


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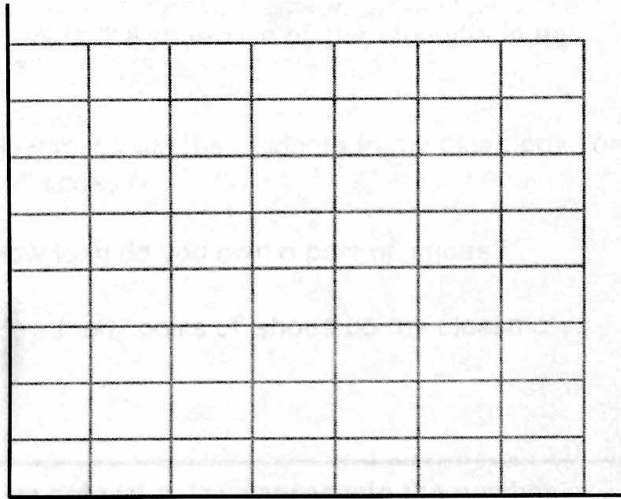
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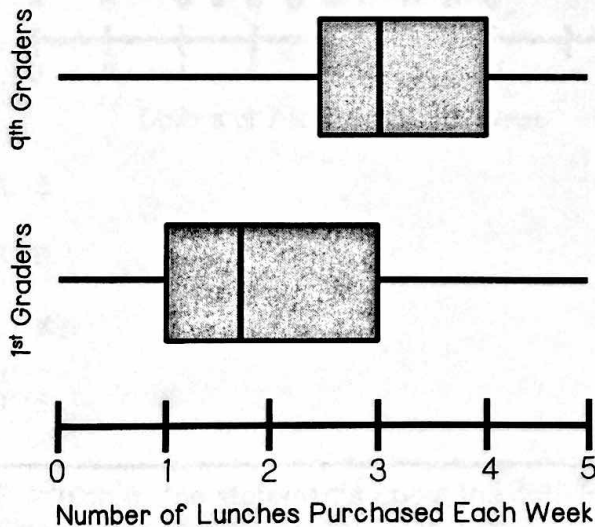
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