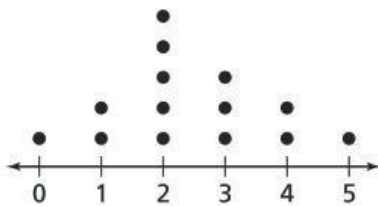


1. Which is a statistical question that could have been asked to collect the data shown in the dot plot?



- (A) How many times did you buy a school lunch last week?
- (B) How many days were in last month?
- (C) Is your favorite number 5?
- (D) What is the perimeter of a 1.5 inch × 1 inch index card?

2. The data set shows the distance, in miles, to school for 10 students.

2, 3, 4, 4, 2, 3, 4, 3, 4, 2

Which of the following best describes the data?

- (A) The data have range 2, and are otherwise unrelated.
- (B) The data contain outliers, so the mean is not the best measure.
- (C) The data are evenly distributed, with mean 3.1.
- (D) The data have mode 3.

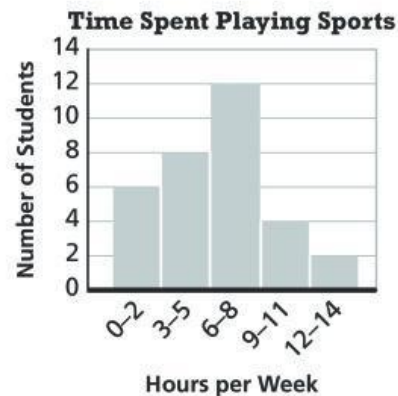
3. The number of miles that Paula ran each week are shown below.

8, 9, 15, 18, 14, 12, 12, 21

Which measure would you use to show how much she improved?

- (A) range
- (B) IQR
- (C) MAD
- (D) mean

4. The histogram shows the number of hours per week that students in Mrs. Green's class spend playing sports.



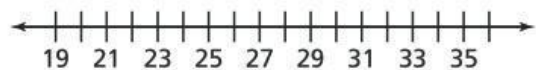
According to the histogram, what percentage of students spend between 6 and 11 hours per week playing sports? Round your answer to the nearest percent.

5. Renata listed the page lengths of her last seven reading assignments:

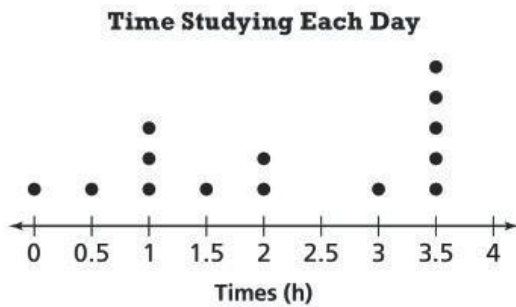
35, 20, 21, 31, 22, 24, 28

The median of the data is _____, the third quartile is _____, and the first quartile is _____. The units of measure are _____.

Use the number line to make a box-and-whisker plot of the data.



6. Hector made a dot plot showing the amount of time he spent studying each day for two weeks. He says that he usually studies 3.5 hours per day because that is the time that occurs most often. Do you agree with Hector's reasoning? Explain.



7. Paula recorded the grams of protein in each serving of 7 different brands of nutritional shakes: 13, 25, 25, 29, 18, 15, and 32.

Paula found at least

in 75% of the shakes. Explain.

8. Frank kept track of the amount of money he earned each day for 2 weeks. The amounts, in dollars, are listed below.

25, 30, 24, 20, 20, 22.5, 75, 27, 27, 22, 22, 27, 22.5, 28

Part A

Find and calculate the measures of center and variability that best summarize Frank's data. Explain.

Part B

Frank says that he typically makes about \$27 per day because the mode is 27. Is Frank's conclusion appropriate? Explain.