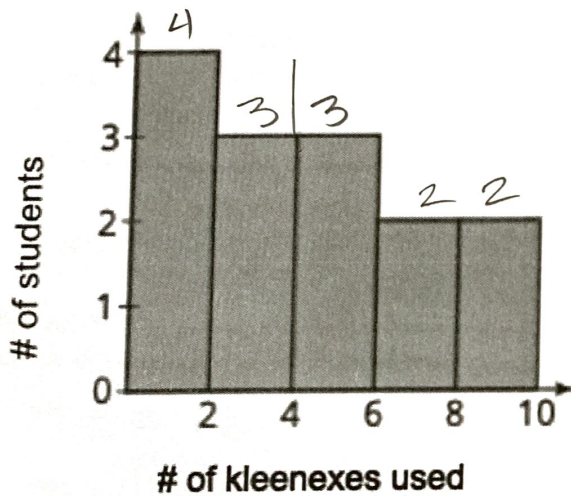


Unit 5 Review (S.ID.A)

Name: Key  
 Period:      #     

1) This histogram represents the number of Kleenexes students used during a flu outbreak.

**Number of kleenexes used in a day by students during a flu outbreak.**



Approaching:

a) How many students are represented in the histogram? 14 students

b) How many students used 4 or more Kleenexes in a day? 7 students

Meeting:

c) Suppose the two measures of center are 3.5 kleenexes and 4 kleenexes. Which of the values is the mean and which is the median? Explain your reasoning.

Mean = 4

Median = 3.5

The data is skewed right, so the mean is to the right of the median.

2) Consider the following data set: 5, 7, 3, 8, 6, 8, 10. Do the following, and round answers to two decimal places, where necessary.

n = 7

Approaching:

a) Calculate the mean for the data set. Show your work.

$$\frac{47}{7}$$

$$\bar{x} = 6.71$$

Meeting:

a) Calculate the sample standard deviation for the data set. Show your work.

$$\begin{aligned} (5 - 6.71)^2 &= 2.92 \\ (7 - 6.71)^2 &= 0.08 \\ (3 - 6.71)^2 &= 13.76 \\ 2(8 - 6.71)^2 &= 3.33 \\ (6 - 6.71)^2 &= 0.50 \\ (10 - 6.71)^2 &= 10.82 \end{aligned}$$

$$\sqrt{\frac{31.41}{6}}$$

$$s = 2.29$$

Unit 5 Review (S.ID.A)

- 3). A restaurant manager compared the number of hours different servers worked over one week. The table shows the number of hours worked per server.  $n=11$

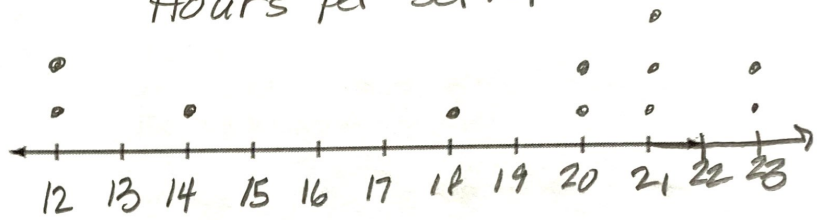
Hours Per Server	20	21	14	21	21	12	18	23	20	23	12
	/	/	/	/	/	/	/	/	/	/	/

Approaching:

12, 12, 14, 18, 20, 20, 21, 21, 21, 23, 23

Hours per Server

- a) Construct a dot plot to represent the data. Use the number line provided.



Meeting:

- b) Determine the five-number summary of the data set. Label your answers.

min = 12

Q1 = 14

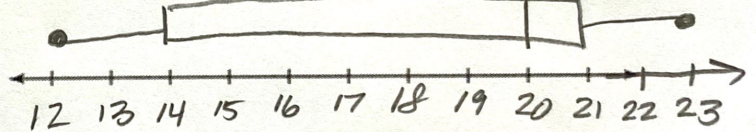
Median = 20

Q3 = 21

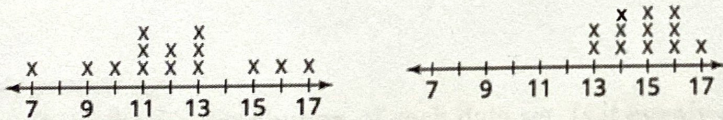
max = 23

- c) Construct a box-and-whisker plot of the data. Use the number line provided.

Hours per Server



- 4) Analyze the data sets below.



Approaching:

- a) Describe the distribution of each data set. Is it evenly distributed, skewed left, or skewed right?

Each is fairly symmetric.

(or evenly distributed)

Meeting:

- b) Predict which of the data sets has a higher standard deviation. Explain your reasoning.

The first set will have the higher standard deviation because the data is more spread out.