Name **Ms. Stein** Date .... Class ....

Labsheet 2ACE Exercise 27

Use for Quiz Review

27. A recent survey asked 25 middle-school students how many movies they see in one month. The table and line plot below show the data.
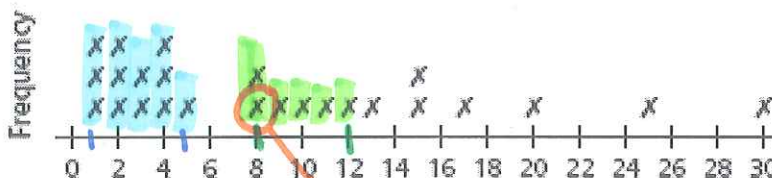
Number of Movies Watched in One Month

Student	Number	Student	Number	Student	Number
Wes	2	Susan	4	Julian	2
Tomi	15	Gil	3	Alana	4
Ling	13	Enrique	2	Tyrone	1
Su Chin	1	Lonnie	3	Rebecca	4
Michael	9	Ken	10	Anton	11
Mara	30	Kristina	15	Jun	8
Alan	20	Mario	12	Raymond	8
Jo	1	Henry	5	Anjelica	17
Tanisha	25				

Movies Watched in One Month

About half the data

The 13th value is the median

a. Identify one section of the line plot where **about half the data** values are grouped.

Since there are 25 pieces of data, 12 pieces of data is about half. From 1-5 is a section where about half are grouped.

Identify a different section where **about one quarter of the data** is grouped.

If 12 pieces is about half, then 6 pieces is about one quarter. From 8-12 is one quarter of the data.

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b. What is the **range** of the data? Explain how you found it.

The range is 29. To find the range, you must subtract the minimum from the maximum.
Max – Min = Range
30 – 1 = 29 movies

c. Find the **mean** number of movies watched by the students. Explain.

. You must add all the data values.
. when you add all 25 data values, you get 225.
. Then, you divide 225 by 25.
. The mean is 9 movies.

d. What do the **range and mean tell you** about the **typical** number of movies
watched for this group of students?

If we have a range of 29 and a mean
of 9, the typical number of movies watched
is close to the lower half of our data.

e. Find the **median** number of movies watched.

The 13th value is the median, since
there are 25 pieces of data.
The 13th piece of data is 8, so 8 is our median.

Are the **mean** and the **median** the same? Why do you think this is so?

The mean is the average, or the
"evening out" of all the data values.

The median is the exact middle
position.

They are not the same.