Name Key

6th Grade Math

Statistics Summative Review

1) Tell whether the following questions are statistical (s) or non-statistical (n) questions.

How many sandwich shops are on SOM Center Road? n
- can count and confirm/research!

What are the favorite movies of students in 6th period math? s
- can collect data from different answers!

What are the weights of all students on the Dream team? s
- can weigh & collect data

Who are the guidance counselors at MMS? n
- only specific answers/can prove

2) Circle the questions above that would have responses which are considered categorical data.

* word answers!

3) Find the mean, median, mode, and range of the following set of numbers:

24, 10, 25, 10, 33, 18

Mean: 20 (Avg.)

Mode: 10 (most)

Median: 21 (middle)

Range: 23 (max-min)

* mean
10
10
18
24
25
33
120 ÷ 6 = 20

* Put Data in order:
10, 10, 18, 24, 25, 33
* median: (18 + 24) ÷ 2 =
42 ÷ 2 = 21

* 33 − 10 = 23

4) Mrs. Trentanelli gave four Social Studies tests this quarter. She accidently lost one of Kari's tests. She knows that Kari had a mean score of 80 and received scores of 75, 85, and 90 on three of her tests. What is the missing ~~test score~~? Show or explain how you found your answer.

$$\frac{(75+80+90+x)}{4} = 80$$

$$4 \times \frac{(250+x)}{4} = 80 \times 4$$

$$250 + x = 320$$
$$-250 \quad -250$$
$$x = 70$$

The missing test score is 70.

5) Divide the following data that represents the scoring by Cavs players in the last playoff game into 4 intervals.

2, 25, 7, 0, 14, 39, 8, 4, 17, 11, 32, 19, 4, 6, 33, 20, 5, 3,

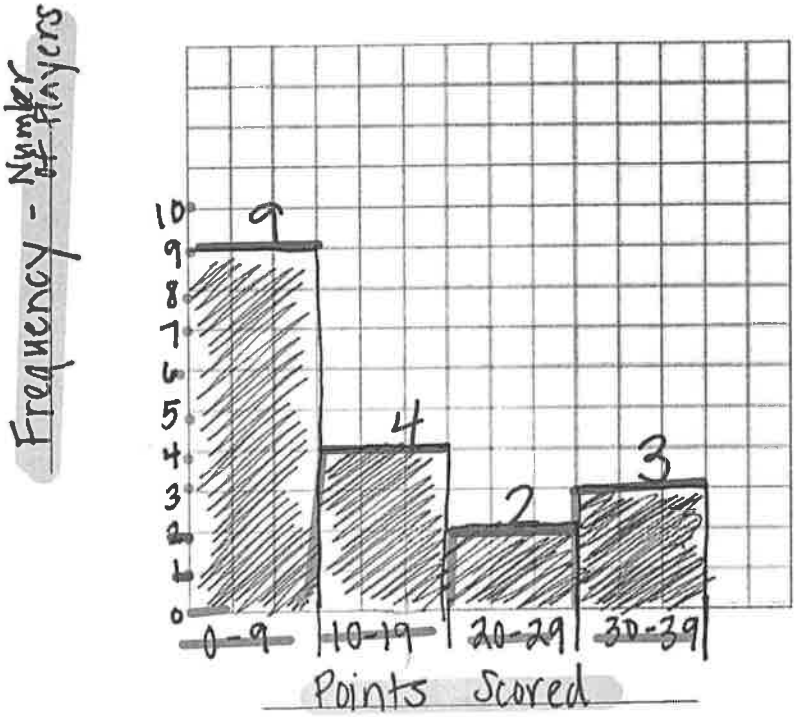
18 values

Points Scored (x)	Tally	Frequency # of players (y)
0-9 (10 values)	~~IIII~~ IIII	9
10-19	IIII	4
20-29	II	2
30-39	III	3
		+ 18

0, 2, 3, 4, 4, 5, 6, 7, 8, 11, 14, 17, 19, 20, 25, 32, 33, 39

Use the data above to create a histogram.

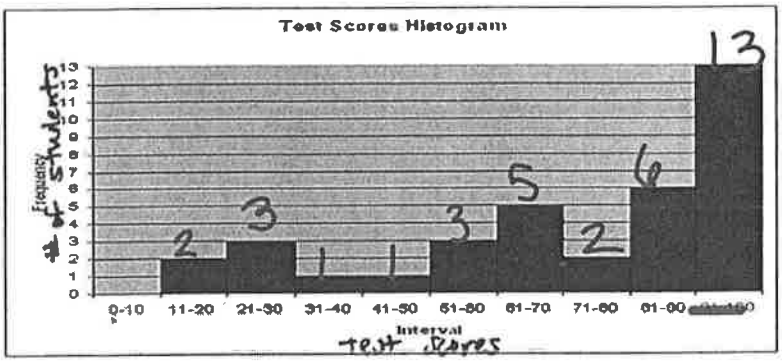
Cavs Scores in Playoff Game



Histograms are not very precise!

* X-axis shows the ranges of points. The squares are shaded to show data. The range intervals do not equal the square size.
* y-axis shows frequency. Labels should be at the intersect of the line.

6) The histogram to the right shows the test scores from the last summative.



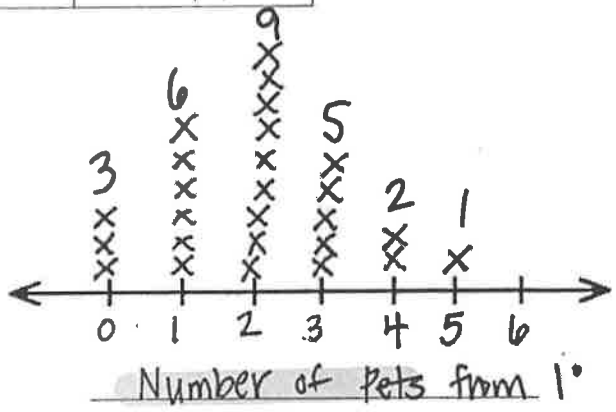
What **cannot** be determined by this data?

a) The total number of test scores 36
b) The highest test score We know it's between 91-100, but cannot tell precisely the score!
c) Number of test scores 71 or higher 21
d) Number of test scores 60 or lower 10

7) Create a line plot for the following data.

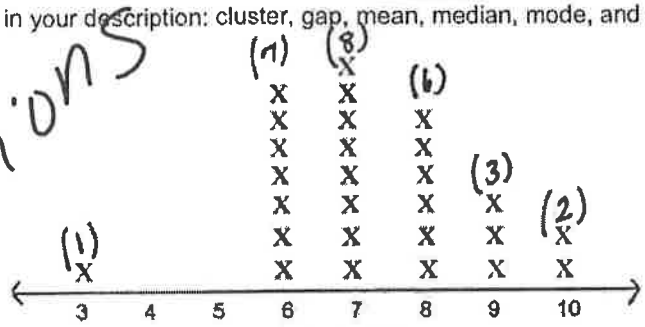
label of # line (frequency)

Number of Pets	Student Responses from 1st Period
0	3
1	6
2	9
3	5
4	2
5	1



8) Using the line plot below, describe its distribution. **You must use at least ~~three~~** of the following vocabulary words in your description: cluster, gap, mean, median, mode, and range. outlier

Know definitions



Quiz Scores

Cluster: 6-8 Mean: 7.26 (Avg - find sum, ÷ by # of terms)

Gap: 4-5 Median: 7 (middle)

Outlier: 3 Mode: 7 (most occurring)

Range: 7 (10-3)

Mean: 3+42+56+48+27+20 = 196 ÷ 27 = 7.26 (sum) (# of terms)

3,6,6,6,6,6,6,6,7,7,7,7,7,7,7,7,7,8,8,8,8,8,8,8,9,9,9,10,10

9) The data below represents the amount of money spent by each student at the Cleveland Zoo gift shop. Use this data to create a box-and-whisker plot.

2, 25, 7, 5, 14, 39, 8, 38, 17, 11, 32, 19, 4, 20, 5

*Put in numerical order: 2,4,5,5,7,8,11,14,17,19,20,25,32,38,39 15 terms

Five Number Summary

Minimum: 2

Lower Quartile: 5

Median: 14 middle

Upper Quartile: 25

Maximum: 39

IQR = 20

*Median = middle value of data set

LQ = median of lower half

UQ = median of upper half.