

# Math 6 - Unit 6: Statistics

Unit 6 Study Guide #2

Name: KEY

Class Period: 1 2 3 4 Date: \_\_\_\_\_

1) Explain the difference between a measure of center and a measure of spread. Give at least two examples of each.

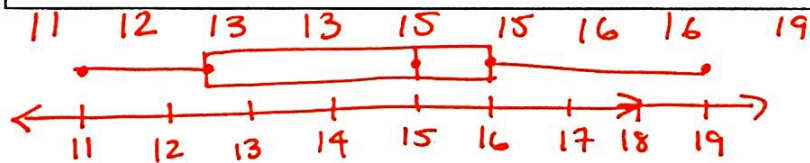
Measures of center (Mean, median, mode) reflect a general number to represent the typical data in a data set. Measures of spread (Range, IQR) show how spread out the data set is.

2) What information does a histogram provide?

How spread out data is, any outliers, shape of data, data in intervals

3) Use the following data to create a box plot:

Ages of Students Who Downloaded "The Hunger Games" at Fiction Secondary School								
<del>11</del>	<del>12</del>	15	<del>16</del>	<del>19</del>	16	<del>15</del>	<del>13</del>	<del>13</del>



**Identify:**

Minimum: 11

Lower Quartile: 12.5

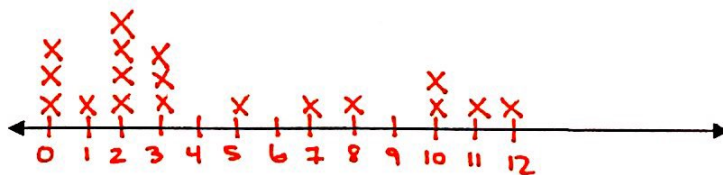
Median: 15

Upper Quartile: 16

Maximum: 19

4) Create a dot/line plot of the following data:

Push-Ups Completed by Students During a Fitness Test					
3	3	10	1	<u>0</u>	2
3	7	0	<u>12</u>	2	5
0	2	8	10	11	2



5) Find the Mean, Median, Mode, Range, Q1, Q3, IQR and any Outliers for the following quiz scores: 92, 85, 80, 95, 88.

80, 85, 88, 92, 95

Mean: 88

Q1: 82.5

Median: 88

Q3: 93.5

Mode: NONE

IQR: 11

Range: 15

Outliers: NONE

Use the following data for questions 6 & 7.

Number of Text Messages per Minute					
6	8	4	1	10	3
5	2	0	2	3	3
12	5	2	1	3	2

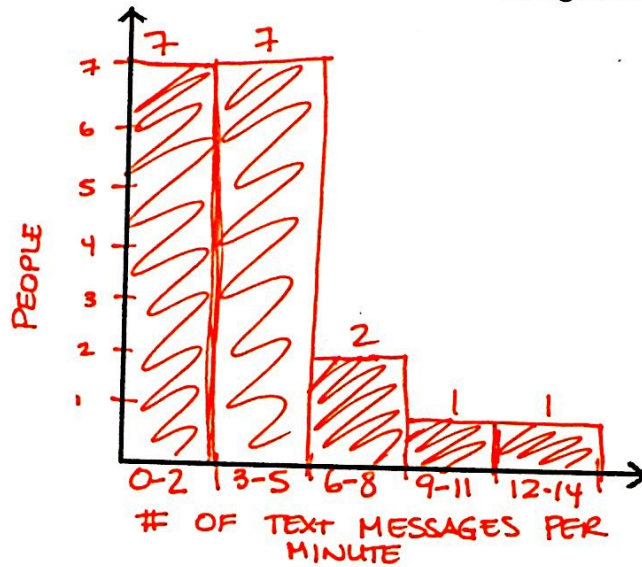
6) Which set of intervals CAN be used for the data given?

NONE

- A. 0-2, 3-5, 6-8, 9-11, 12+ NOT EQUAL
- B. 0-1, 2-5, 6-7, 8-15 NOT EQUAL
- C. 1-2, 3-4, 5-6, 7-8, 9-10, 11-12 DOES NOT INCLUDE ALL DATA
- D. 0-3, 3-6, 6-10, 10-13 NOT EQUAL

INTERVALS	TALLY	FREQUENCY
0-2		7
3-5		7
6-8		2
9-11		1
12-14		1

7) Use the intervals and the data above to create a histogram:

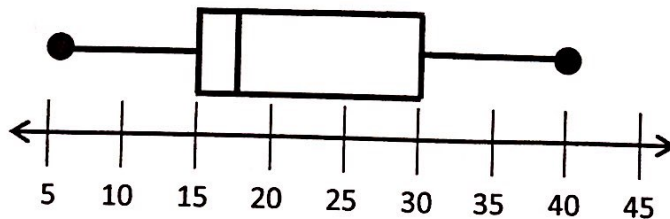


8) Patton is surveying his awesome classmates in homeroom. Which question below is NOT a statistical question?

- A. How many One Direction songs are on your MP3?
- B. What was your highest grade on your last report card?
- C. How many kids are in your homeroom?
- D. How many "Diary of a Wimpy Kid" books have you read?

THIS IS THE ONLY ONE THAT IS A STATISTICAL QUESTION.

9) Identify the interquartile range from the box plot below. 15



10) Which measure is MOST affected by an outlier?

- A. Mean
- B. Median
- C. IQR
- D. Mode