

**Statistical Reasoning**  
**Collecting and Analyzing Data**

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

**Measures of Center and Spread Practice**

1. Twelve AMDM students at North Cobb High School have watched the following number of hours of television the past week:

10	5	32	4	8	3	5	4	2	1	6	1
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a. Find the mean: \_\_\_\_\_ b. Find the median: \_\_\_\_\_

2. The following chart gives the high scores of a popular video game

RSH	1109	DAV	1210
ABC	1038	BRN	930
XYZ	1020	CSR	1180
HYB	1038	SAS	1029
VAC	1006	AAA	936

a. Find the mean \_\_\_\_\_

b. Median \_\_\_\_\_

c. Mode \_\_\_\_\_

3. The following are the number of millions Mr. H's mixtapes sold each month for the past year.

January	10	July	15
February	9	August	9
March	6	September	7
April	3	October	4
May	12	November	5
June	13	December	8

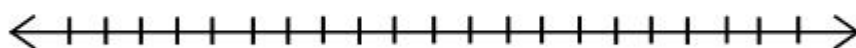
Find the following statistics and draw a box plot in the provided space.

a. Minimum: \_\_\_\_\_ b. Q1: \_\_\_\_\_ c. Median: \_\_\_\_\_

d. Q3: \_\_\_\_\_ e. Maximum: \_\_\_\_\_

f. Range: \_\_\_\_\_ g. IQR: \_\_\_\_\_

h. Boxplot:



4. A group of seven students from Mr. Denison's 1<sup>st</sup> block class was randomly selected and asked to indicate the number of study hours each put in before taking a major exam. The data are as follows:

Mean \_\_\_\_\_

Median \_\_\_\_\_

Mode \_\_\_\_\_

Range \_\_\_\_\_

Student	Hours of Study
1	4
2	3
3	3
4	5
5	1
6	1
7	2

5. A group of seven students from Mr. H's 3<sup>rd</sup> block class was randomly selected and asked to indicate the number of study hours each put in before taking a major exam. The data are as follows:

Mean \_\_\_\_\_

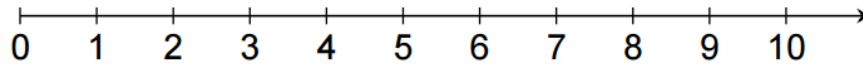
Median \_\_\_\_\_

Mode \_\_\_\_\_

Range \_\_\_\_\_

Student	Hours of Study
1	2
2	0
3	1
4	3
5	1
6	3
7	4

6. Make a comparative box and whisker plot for the 2 classes.



7. According to the box and whisker plot comparison, which class studies harder?

8. Find the standard deviation of the both classes.

Test scores for Denison	$x - \bar{x}$	$(x - \bar{x})^2$
4		
3		
3		
5		
1		
1		
2		
Standard Deviation:		

Test scores for Hybart	$x - \bar{x}$	$(x - \bar{x})^2$
2		
0		
1		
3		
1		
3		
4		
Standard Deviation:		

9. According to the box and whisker plot comparison, which class studies harder?