

DATA

ASSESSMENT

You may use a calculator to answer the following questions.

1. Scores on the first Physics test are as follows:

Class 1

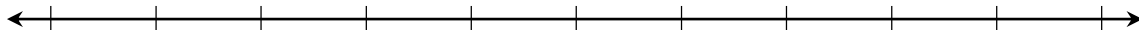
Student	A	B	C	D	E	F	G	H	I	J
Score	72	43	86	77	93	99	80	92	78	98

Class 2

Student	A	B	C	D	E	F	G	H	I
Score	22	83	69	100	100	72	98	81	75

- a. Sketch the box-and-whisker plot of each data set on the same scale. Identify the five number summary for each. Using 1.5 interquartile ranges up from Q3 and down from Q1, does the data have any outliers?

Class 1	Class 2
Max: _____	Max: _____
Q3: _____	Q3: _____
Med: _____	Med: _____
Q1: _____	Q1: _____
Min: _____	Min: _____
Outliers: _____	Outliers: _____



- b. What is the mean for each class? (Round to the nearest tenth)

Class 1	Class 2
Mean: _____	Mean: _____

- c. Which class did better and why?

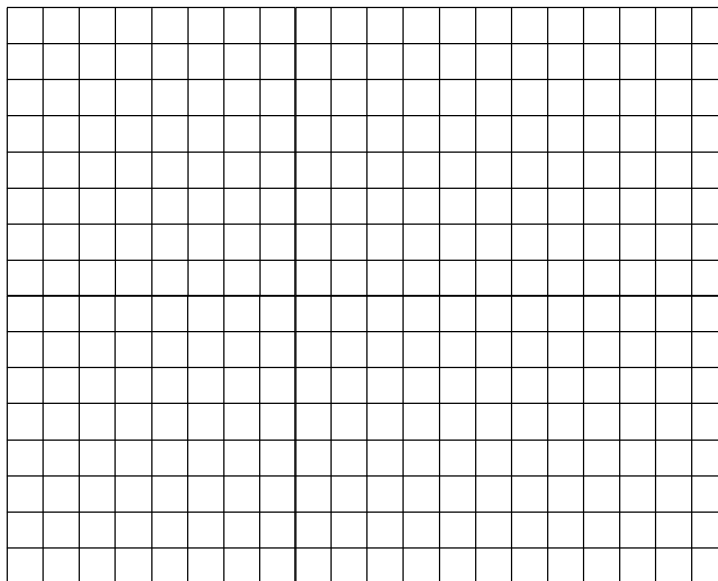
- d. What is the MAD for Class 2?

MAD: _____

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- d. Create a side-by-side histogram of the two classes. (REMEMBER TO LABEL IT!)



- e. What does the histogram tell you about the data? Compare both groups.

2. A sample of students were surveyed about their transportation.

Grade	Walk	Car	Bus	Total
6	13	47	55	
7	19	35	57	
8	8	51	75	
Total				

- a. Complete the frequency table.
b. If there are 1800 students in the school, how many 8th graders might be expected to ride the bus?
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- c. Use the data in the original frequency table to generate a row relative frequency table.

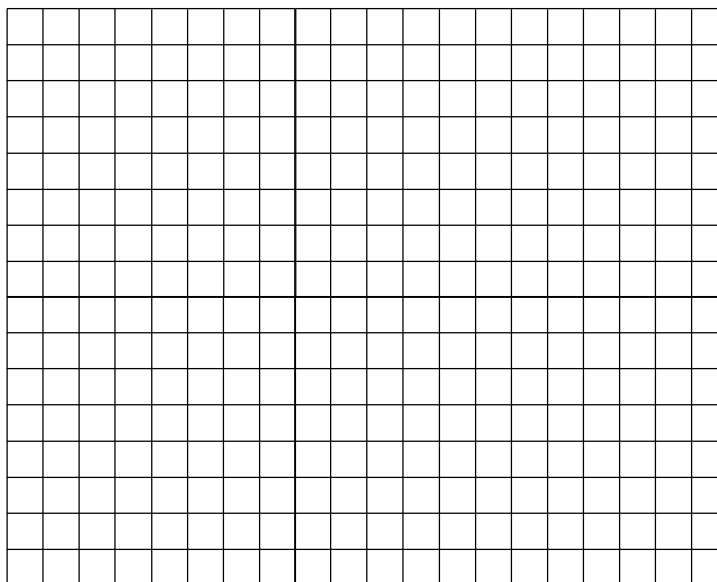
Grade	Walk	Car	Bus	Total
6				
7				
8				
Total				

- d. What is the chance that a chosen student would walk given that they were in 8th grade? _____

3. This is a table of exercise times and body mass index.

Exercise Time	0	30	175	200	212	230	250	0	30
BMI (%)	26	20	20	19	17	14	12	34	28

- a. Create a scatter plot of this data.



- b. Use your calculator to find the line of best fit and the correlation coefficient of the data.

Line of Best Fit: _____ r = _____

- c. Describe the relationship between these two data sets.