

Name:

Modeling Data | 8.1

Ready, Set, Go!



<http://www.flickr.com/photos/garryknight/740038>

Ready

Topic: Measures of central tendency

Sam's test scores for the term were 60, 89, 83, 99, 95, and 60.

1. Suppose that Sam's teacher decided to base the term grade on the mean.
 - a. What grade would Sam receive?
 - b. Do you think this is a fair grade? Explain your reasoning.

2. Suppose that Sam's teacher decided to base the term grade on his median score.
 - a. What grade would Sam receive?
 - b. Do you think this is a fair grade? Explain your reasoning.

3. Suppose that Sam's teacher decided to base the term grade on the mode score.
 - a. What grade would Sam receive?
 - b. Do you think this is a fair grade? Explain your reasoning.

4. Aiden's test scores for the same term were 30, 70, 90, 90, 91, and 99. Which measure of central tendency would Aiden want his teacher to base his grade on? Justify your thinking.

5. Most teachers base grades on the mean. Do you think this is a fair way to assign grades? Why or why not?

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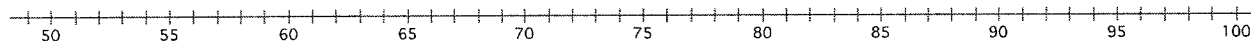
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Set

Topic: Examining data distributions in a box-and-whisker plot

60, 64, 68, 68, 72, 76, 76, 80, 80, 80, 84, 84, 84, 84, 88, 88, 88, 92, 92, 96, 96, 96, 96, 96, 96, 96, 100, 100

6. Make a box-and-whisker plot for the following test scores.



7a. How much of the data is represented by the box?

b. How much is represented by each whisker?

8. What does the graph tell you about student success on the test?

Go

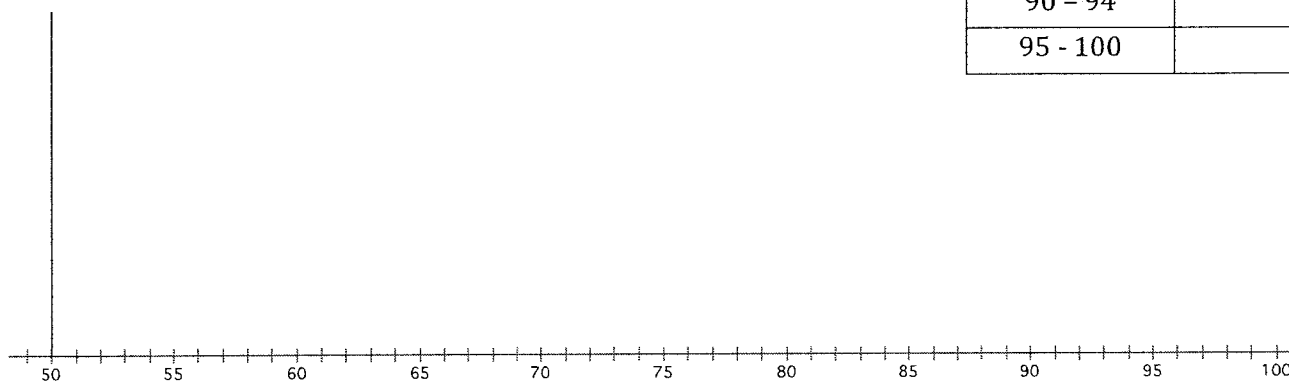
Topic: Drawing histograms.

Use the data from the SET section to answer the following questions

9. Make a frequency table with intervals. Use an interval of 5.

10. Make a histogram of the data using your intervals of 5.

Score	Frequency
60 - 64	
65 - 69	
70 - 74	
75 - 79	
80 - 84	
85 - 89	
90 - 94	
95 - 100	



Need Help? Check out these related videos:

http://www.khanacademy.org/math/statistics/e/mean_median_and_mode<http://www.khanacademy.org/math/algebra/ck12-algebra-1/v/box-and-whisker-plot><http://www.khanacademy.org/math/algebra/ck12-algebra-1/v/histograms>

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