

Name _____

Date _____

8A; Algebra 1

Period _____

Homework

1) On her first two math tests, Renee received grades of 67 and 79. Her mean grade for these two tests was 73. On her third test she received a grade of 91. Renee found the mean of 73 and 91 and said that her mean for the three tests was 82. Do you agree with Renee? Explain why or why not.

2) Find the mean of: $5\frac{1}{2}, 2\frac{3}{4}, 7\frac{1}{2}, 5\frac{3}{4}, 4\frac{1}{2}$

3) Find the median of: 21, 24, 23, 22, 20, 24, 23, 21, 22, 23

4) Find the mode for each distribution.

(a) 2, 2, 3, 8, 8,

(b) 2, 2, 8, 8, 8

5) When the data consists of 3, 4, 5, 4, 3, 4, 5, which statement is true?

a) mean > median

b) mean > mode

c) median < mode

d) mean = median

6) For which set of data does the median equal to the mode?

a) 3, 3, 4, 5, 6

b) 3, 3, 4, 5

c) 3, 3, 4

d) 3, 4

7) The mean of three numbers is 31. The second is 1 more than twice the first. The third is 4 less than 3 times the first. Find the numbers.

8) Andy has grades of 84, 65, and 76 on three math tests. What grade must he obtain on the next tests to have an average of exactly 80 for the four tests?

9) Andrew needs a mean (average) score of 88 on four tests to earn a midterm grade of B+. If the mean of his scores for the first three tests was 86, what is the *lowest* score on a 100-point scale that he can receive on the fourth tests to have a midterm grade of B+?

10) In a certain school district, bus service is provided for students living at least $1\frac{1}{2}$ miles from school. The distances, rounded to the nearest half mile, from school to home for ten students are; 0, $\frac{1}{2}$, $\frac{1}{2}$, 1, 1, 1, 1, $1\frac{1}{2}$, $3\frac{1}{2}$, and 15 miles. Explain why the mean is not a good measure of central tendency to describe the average distance between home and school for these students.

11) Which measure of central tendency would best describe this week's "top pick" for a teenager's favorite movie?