

Name: _____ Date: _____
 Topic: _____ Class: _____

Main Ideas/Questions Notes/Examples

Measures of \bar{x}
CENTRAL TENDENCY

Mean: Average, Add up all values + \div by # of values
 Median: Middle # when # are in order from least to greatest
 Mode(s): # that occurs the most

RANGE

Biggest # - smallest # OR Max - Min

EXAMPLES

Directions: Find the mean, median, mode(s), and range of each data set. Round to the nearest tenth when necessary.

1. The daily high temperature for the past two weeks in Orlando:
~~{89, 90, 88, 91, 82, 90, 88, 88, 86, 90, 92, 87, 89, 86}~~
 82, 86, 86, 87, 88, 88, 88, 89, 89, 90, 90, 90, 91, 92
 $\frac{1236}{14} = 88.3$ Mean
 Mean: 88.3
 Median: 88.5 = $\frac{88+89}{2}$
 Mode(s): 88, 90 (3x)
 Range: 92 - 82 = 10

2. The number of points scored by a football team during their 16-game season:
~~{7, 31, 33, 16, 30, 45, 25, 25, 25, 16, 28, 24, 20, 33, 31, 10}~~
 7, 10, 16, 16, 20, 24, 25, 25, 25, 28, 30, 31, 31, 33, 33, 45
 $\frac{399}{16} = 24.9375$ Mean
 Mean: 24.9
 Median: 25 = $\frac{25+25}{2}$
 Mode(s): 25 (3x)
 Range: 45 - 7 = 38

3. Jenna's math quiz grades in the second quarter:
~~{78, 90, 95, 84, 80, 82, 87, 98, 72}~~
 72, 78, 80, 82, 84, 87, 90, 95, 98
 $\frac{766}{9} = 85.1$ Mean
 Mean: 85.1
 Median: 84
 Mode(s): None
 Range: 98 - 72 = 26

Trevon has four grades in science class so far: 97, 78, 89, and 94. If he has a test coming up, what grade would he need so his overall average is at least 90?

$$\frac{97+78+89+94+X}{5} \geq 90$$

$$358+X \geq 90 \cdot 5$$

$$358+X \geq 450$$

$$-358 \quad -358$$

$$X \geq 92$$