

Notes on Finding Mean, Median, Mode, and Range

MEAN: The mean is the AVERAGE number in a set of data. To find the mean, first find the **sum** (add) of the data set. Then **count** how many numbers are in the data set. Finally, divide the sum by the number of elements in the data set.

For example, let our data set be 20, 13, 22, 17, and 28. If we find the sum of this set, $20+13+22+17+28=100$. We count and see there are 5 numbers in the data set. We then divide 100 by 5 and get 20. So, our mean for this data set is 20.

MEDIAN: The median is the middle number in a set of data. To find the median, we put all of the numbers in numerical order and then, starting with the outside numbers, count inwards until we reach the middle number. (If there is an even number of elements in our data set, we have to take the 2 numbers in the “middle”, add them together, and divide by 2 to find the actual median.)

For example, let our data set be 3, 2, 4, 6, 5, 1. If we put them in order, we see it as 1, 2, 3, 4, 5, 6. Counting inwards leaves us with 3 and 4 being in the “middle.” We add them together and then divide by 2. So $3+4=7$ and $7/2=3.5$. So the median for this data set is 3.5.

MODE: The mode of a data set is the number that appears most frequently. For example, if our data set is 3, 4, 5, 3, 2, 3, 4, 0, 1, 3, we see that 3 appears more often than any other number. So our mode is 3. Note, there can be more than one mode, or there can be no mode.

RANGE: The range of a data set is the difference between the highest number and the lowest number in the data set. For example, let our data set be 20, 13, 22, 17, and 28. Our highest number is 28. Our lowest number is 13. So, the difference between these numbers is $28 - 13 = 15$. So, the range of the data set is 15.