

Mean, Median, Mode, and Range: The purpose of statistics is to describe and make data meaningful. For example, a teacher might find the class average on a certain assignment to get a feel for how the lesson went. Below are steps necessary to finding the mean, median, mode, and range.

Mean (average): To calculate the mean, you must add all the numbers up, then divide by how many numbers there are. For example, let's say your football team played 5 games and scored 14, 28, 21, 10, and 17 points. To find the average number of points scored, you would add $14 + 28 + 21 + 10 + 17$, then divide by 5. The total number of points scored is 90. Take that total divided by 5 games and you get the average (18). The average number of points scored is 18 points.

Median: To find the median, you arrange the numbers in order from least to greatest. Once they are in order, you find the number in the middle. Using the same scores as above, the order would be: 10, 14, 17, 21, 28. The number in the middle is 17, therefore the median is 17 points.

Mode: The mode is the number or numbers that occur most often in a data set. In this example, there is no mode because each number occurs once.

Range: The range is the difference between the largest number and the smallest number. For your football team, the range would be 18 ($28 - 10$).

TASK #1: Your task is to find the mean, median, mode, and range of the following set of numbers:

4, 10, 12, 4, 8, 7, 11, 16, 1

TASK #2: Develop a survey question that you will ask 50 students. The question must be one that has an answer that is a number. Once you have asked and recorded all 50 responses, find the mean, median, mode, and range. (for the mean, you may use a calculator)