



Mean, Median, Mode Examples

Mean, median, and mode are three kinds of "averages". There are many "averages" in statistics, but these are, I think, the three most common, and are certainly the three you are most likely to encounter in Psychology, if the topic comes up at all.

- The "mean" is the "**average**" you're used to, where you add up all the numbers and then divide by the number of numbers.
 - The "median" is the "**middle**" value in the list of numbers. To find the median, your numbers have to be listed in numerical order, so you may have to rewrite your list first.
 - The "mode" is the value that occurs most often. If ***no number is repeated***, then there is no mode for the list.
 - The "**range**" is just the difference between the largest and smallest values.
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Find the mean, median, mode, and range for the following list of values:

13, 18, 13, 14, 13, 16, 14, 21, 13

The Mean	Mean=15 The mean is the usual average, so: $(13 + 18 + 13 + 14 + 13 + 16 + 14 + 21 + 13) \div 9 = 15$ Note that the mean isn't a value from the original list. This is a common result. You should not assume that your mean will be one of your original numbers.
The Median	Median=14 The median is the middle value, so I'll have to rewrite the list in order: 13, 13, 13, 13, 14, 14, 16, 18, 21 There are nine numbers in the list, so the middle one will $(9 + 1) \div 2 = 10 \div 2 = 5\text{th number:}$ 13, 13, 13, 13, 14, 14, 16, 18, 21 So the median is 14. (Note: The formula for the place to find the median is " $([\text{the number of data points}] + 1) \div 2$ ", but you don't have to use this formula. You can just count in from both ends of the list until you meet in the middle, if you prefer. Either way will work.)
The Mode	Mode=13 The mode is the number that is repeated more often than any other, so 13 is the mode.
The Range	Range=8 The "range" is just the difference between the largest and smallest values, The largest value in the list is 21, and the smallest is 13, so the range is $21 - 13 = 8$



Mean, Median, Mode Worksheet (Show Your Work)

Name: _____ Period #: _____

1. A list of five test scores were 60, 67, 73, 63 and 67. Find the following:

a) Mean =

b) Median =

c) Mode =

2. Seven people were asked how many miles they lived from work. The responses were 15, 7, 14, 21, 5, 9 and 13. Find the following:

a) Mean =

b) Median =

c) Mode =

3. At a pet store, a survey was taken asking how many pets each person had. The results were: 2, 5, 3, 1, 0, 4, 2, 7, 0, 2, 7, 3. Find the following:

a) Mean =

b) Median =

c) Mode =

4. A sample of eight students were randomly selected and asked, "How many times did you check your email yesterday?" The numbers were: 3, 0, 8, 7, 10, 2, 6, 12.

Find the following: a)

Mean =

b) Median =

c) Mode =

5. A student had taken six tests and received scores of 88, 73, 81, 83, 79, 94. The seventh test was coming up and the student want to know:

a) What was needed on the seventh test to have a mean score of 83.
Find the seventh test score?

b) What would be the median using the seventh test score from part (a)?

Median =

c) What would be the mode using the seventh test score from part (a)?

Mode =