



Median, Mode, Range, Mean and Estimated Mean

Study Development Quick Guide

Median

1. Put all of the values in order from smallest to largest.
2. Find the middle value if there is an odd number of values, or middle two values if there is an even number.
3. If you have two middle values, add them together and divide by 2. If you only have one value, do not change it. This is the median.

Mode

1. Write down the different values you have in your list.
2. Write how many times each one has come up next to the value.
3. Whichever has the largest number next to it is the mode.

Range

1. Find the highest and lowest values.
2. Calculate highest value – lowest value. This is the range.

Mean

1. Add up all the values.
2. Divide this by the number of values there are. This is the mean.

Estimated mean

1. Calculate the midpoint of each group.
2. Calculate midpoint of the group multiplied by frequency of the group for each group.
3. Calculate the total of the frequencies, and the total of the midpoint \times frequencies.
4. Divide the total of the midpoint \times frequencies by the total of the frequencies. This gives you the estimated mean.



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