

Mean, Median, Mode, and Range

The chart below shows Yuri's scores on his first 8 math tests.

Test	1	2	3	4	5	6	7	8
Points	85	72	94	85	95	94	85	76

Find the range, mean, median, and mode of Yuri's scores.

How to find the range:

Subtract the minimum number in the set from the maximum number in the set.

$$95 - 72 = 23$$

The range is 23.

How to find the median:

Arrange the numbers in order. Find the number exactly in the middle. If there are two numbers in the middle, find the mean of those middle numbers.

$$72 \ 76 \ 85 \ \mathbf{85} \ \mathbf{85} \ 94 \ 94 \ 95$$

There are two middle numbers, 85 and 85.

$$85 + 85 = 170. \ 170 \div 2 = 85$$

The median is 85.

How to find the mean:

Add up all of the numbers. Then divide the sum by the number of values.

$$85 + 72 + 94 + 85 + 95 + 94 + 85 + 76 = 686$$

$$686 \div 8 = 85.75$$

The mean is 85.75.

How to find the mode:

Choose the number that occurs most often. Sometimes there is no mode, and sometimes there is more than one mode.

$$72 \ 76 \ \mathbf{85} \ \mathbf{85} \ \mathbf{85} \ 94 \ 94 \ 95$$

85 is the number that occurs most often, so the mode is 85.

Find the mean, median, mode, and range of each data set. Round decimal answers to the nearest hundredth.

- 8, 4, 3, 9, 7, 4, 3, 3, 7
- 25, 26, 24, 21, 25, 21, 23, 21, 26, 21, 20
- \$2, \$4, \$5, \$10, \$1, \$3, \$4, \$10, \$10
- 0.2, 0.3, 0.9, 0.8, 0.9, 0.8, 0.4, 0.9
- The two middle numbers in a set are 56 and 78. What is the median?

Mean, Median, Mode, and Range

Find the mean, median, mode, and range of each data set. Round the decimal answers to the nearest hundredth.

1. 4, 6, 4, 5, 2, 3, 6, 7, 4 _____
2. 0.6, 0.9, 0.5, 0.3, 0.6, 0.4 _____
3. 32 mL, 42 mL, 88 mL, 35 mL, 40 mL, 73 mL, 88 mL, 17 mL

4. If you told someone that the greatest depth in Lake Superior was 1,333 ft, would you be expressing a number similar to mode, median, mean, or range?

The chart shows the number of keys on several different kinds of musical instruments with keyboards.

Instrument	Keys
Average spinet piano	88
Hammond organ	122
Clavichord	60
Harpichord	48
Average grand piano	88

5. To the nearest whole number, find the mean in the number of keys listed for each instrument.

6. For this data set, which is greater, the median or the mode?

Test Prep

7. The mean of a batting average of a baseball player for 5 years was 0.281. Four of his batting averages were 0.301, 0.299, 0.287, and 0.243. What was the fifth average?
A. 0.303 B. 0.286 C. 0.277 D. 0.275
8. **Writing in Math** Sheila said that in any data set, the median and the mean are usually very similar in value. Is she correct? Explain.

