

Example

Mean, median, and mode are measures of central tendency.

What will be the mean, median, and mode of the given data?

25, 27, 26, 26, 23, 29, 26

Mean: Sum of all data divide by the number of all data items. We also call it the average.

$$\begin{aligned}\text{Mean} &= (25 + 27 + 26 + 26 + 23 + 29 + 26) \div 7 \\ &= 182 \div 7 \\ &= 26\end{aligned}$$

$$\therefore \text{Mean} = 26$$

Median: The middle number of the data arranged in numerical order 23, 25, 26, **26**, 26, 27, 29.

\therefore The middle number is 26.

$$\therefore \text{Median} = 26$$

Mode: The number of that occurs most after in the data. 26 come 3 times.

\therefore 26 is mode.

$$\therefore \text{Mode} = 26$$

In case of median; if the data has an even number of items, then the median is the average of the two middle numbers.

Range: The difference between the greatest number and smallest number is the range. Greatest number (L) = 29

$$\text{Smallest number (S)} = 23$$

$$\therefore \text{Range} = L - S = 29 - 23 = 6$$

Exercise

1. Find mean, median, mode, and range.

a) 35, 31, 33, 32, 31, 28

b) 34, 13, 10, 11, 6, 8, 12, 13

Exercise

2. What will be the value of the range if the data is widely spread out?
3. Write a set of five data for each of the following.

a) Mean = 29	b) Range = 5
c) Mode = 12	d) Median = 107
e) Mean and mode = 305	f) Mean = 7 and range = 12

4. Use the table given and answer the questions.

- a) What is the mean grade?
- b) What will be modal grade of the data?
- c) Find range of the grades.

Student name	Grade Earned
Jack	20
John	40
Jolly	35
Rose	40
Kelly	55
Kim	68