

MEAN/AVERAGE

OUTLIER.

In a set of numbers a number which one is higher or lower than the other number is called outlier



Example: 3,7,4,44,2

The outlier is 40. It is much bigger than the other numbers

$$\text{Mean with outlier } \frac{3+7+4+44+2}{5} = \frac{60}{5} = 12$$

$$\text{Mean without outlier } \frac{3+7+4+2}{4} = \frac{16}{4} = 4$$

The outlier makes our mean higher. It makes Mean Lie

Find the outlier. Then find the mean with and without the outlier.

1) 28, 33, 25, 8, 30, 32

Outlier

Mean with outlier

Mean without outlier

2) 46, 5, 2, 12, 9, 7, 0, 4

Outlier

Mean with outlier

Mean without outlier

SPECIAL CIRCUMSTANCES

If there is two numbers in the middle you have to add them and divide it by two.

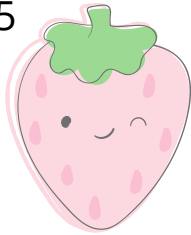


Example: 1, 2, 3, 7, 8, 9 → 1, 2, 3, 7, 8, 9

7 and 3 are the median

$$7 + 3 = 10 = \frac{10}{2} = 5$$

Median is 5



Find the median for each set.

1) 12, 25, 4, 6, 8, 4

Median _____

2) 14, 12, 9, 7, 4, 5, 10, 3

Median _____

MODE(Most)

Numbers which occur more than two times or often will have more than one mode.



Example: 2, 3, 4, 4, 2, 3, 3, 4 → 2, 2, 3, 3, 3, 4, 4, 4

3 and 4 are the modes

Find the mode for each set.

1) 2, 3, 4, 2, 3, 4, 4, 2

2) 12, 10, 13, 12, 10, 12

Find the Mean, Median, Mode, Range for each set.

1) 2, 5, 2, 4, 8, 9, 12, 29, 4, 4

Mean

Median

Mode

Range

2) 14, 16, 25, 28, 65, 16, 19, 14

Mean

Median

Mode

Range