12, 8, 22, 16, 15, 19, 9, 13, 20, 19, 4

$$\frac{\text{sum of all data}}{\text{how many data points}} = \frac{157}{11} = \boxed{15.7}$$

12, 8, 22, 16, 15, 19, 9, 13, 20, 19, 4

4, 8, 9, 12, 13, 15, 16, <u>19, 19,</u> 20, 22

$\boxed{19}$

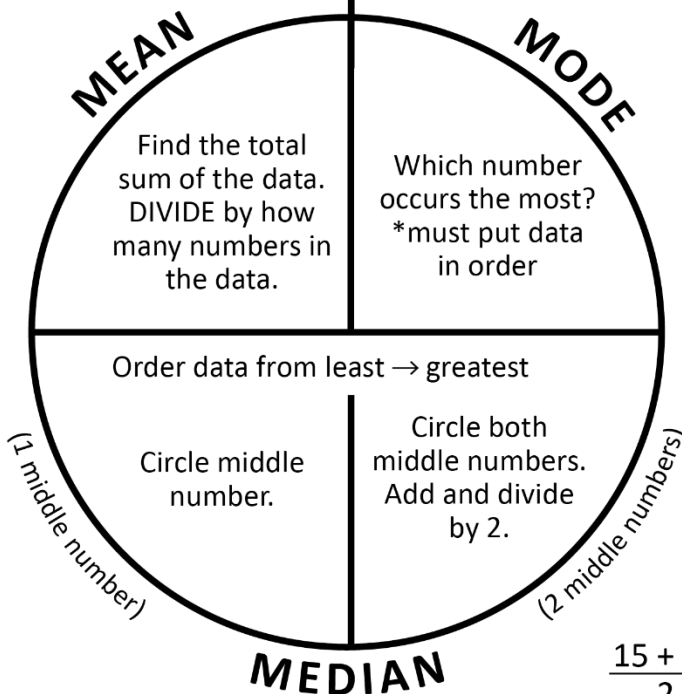## RANGE

Difference between the greatest value and the smallest value.

Max. - min.
22 - 4 = $\boxed{18}$

MEAN

Find the total sum of the data. DIVIDE by how many numbers in the data.

MODE

Which number occurs the most?
*must put data in order

Order data from least → greatest

(1 middle number)

Circle middle number.

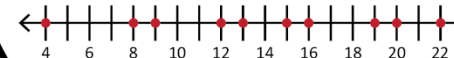Circle both middle numbers. Add and divide by 2.

(2 middle numbers)

MEDIAN

$\boxed{15}$

$$\frac{15 + 16}{2} = \boxed{15.5}$$

OUTLIERS

What data point does not match?

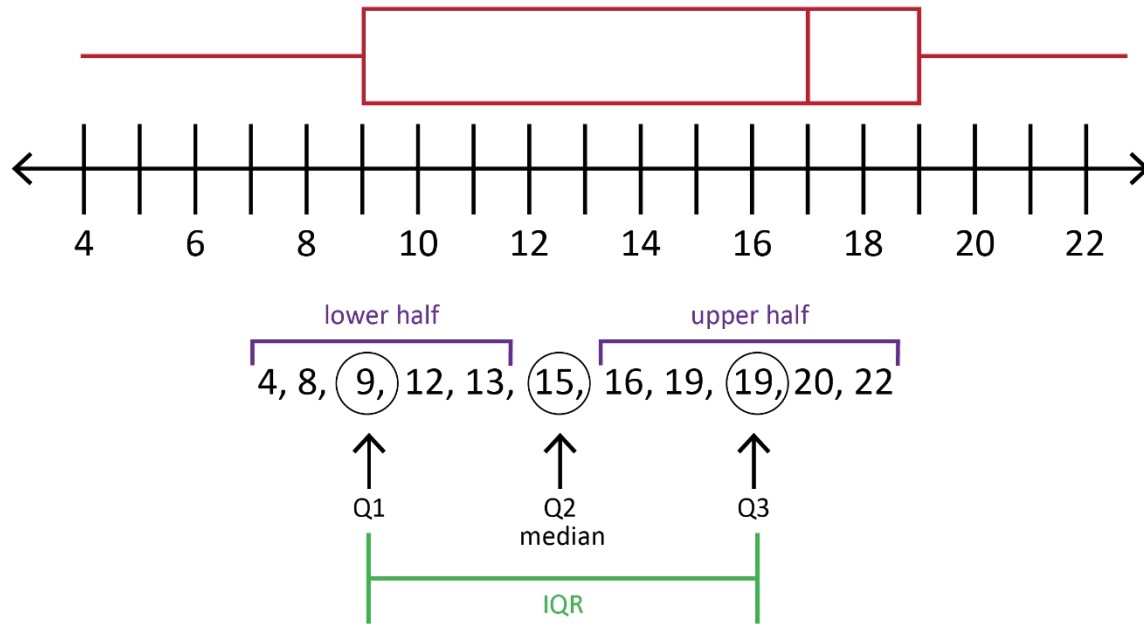*Not all data sets have an outlier

4 6 8 10 12 14 16 18 20 22

$\boxed{4}$

4, 8, 9, 12, 13, (15,) 16, 19, 19, 20, 22

12, 8, 22, 16, 15, 19, 19, 13, 20, 19, 4

8, 9, 12, 13, (15, 16,) 19, 19, 20, 22

12, 8, 22, 16, 15, 19, 9, 13, 20, 19

GUIDED NOTES: TEACHER GUIDE

lower half   upper half

4, 8, (9,) 12, 13, (15,) 16, 19, (19,) 20, 22

Q1   Q2   Q3
            median

IQR

Q1	Median of lower half of data
Q2	Median of the data
Q3	Median of upper half
IQR	Range from Q1 to Q3

*Always include least and greatest data points to create the whiskers.