

# Handling Data

Mode, Median, Mean and Range

The Mode

# The Mode

The mode is the most frequent value  
*(it appears the most)*

Count how many of each value appears

The mode is the value that appears the most

*\*You can have more than one mode\**

# The Mode

The mode is the most frequent value  
*(it appears the most)*

The mode is the value that appears the most  
It helps if you order the values from smallest to largest.

2, 3, 4, 1, 2, 3, 5, 6, 3, 1

*(order them from smallest to largest)*

1, 1, 2, 2, 3, 3, 3, 4, 5, 6

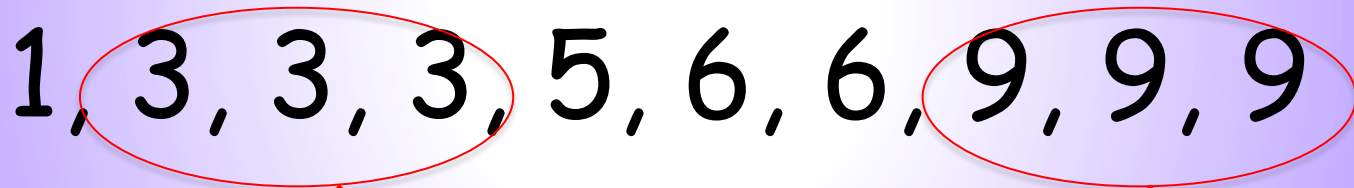
3 is the  
mode  
because it  
appears  
the most

*(Count them to check you have the same amount of numbers)*

# You can have more than one mode

The mode is the most frequent value  
*(it appears the most)*

1, 3, 3, 3, 5, 6, 6, 9, 9, 9



There are two modes here 3 and 9

# The Mode

The mode is the most frequent value  
(it appears the most)

The mode is the value that appears the most

Work out the mode of these numbers

\*It helps if you order the values from smallest to largest.\*

1, 5, 6, 4, 3, 5, 3, 5, 6, 2, 10

(order them from smallest to largest)

1, 2, 3, 3, 4, 5, 5, 5, 6, 6, 10

5 is the mode because it appears the most

(Count them to check you have the same amount of numbers)

# The Mode

The mode is the most frequent value  
(it appears the most)

The mode is the value that appears the most

Work out the mode of these numbers

\*It helps if you order the values from smallest to largest.\*

11, 23, 22, 14, 23, 10, 11, 16, 19

(order them from smallest to largest)

10, 11, 11, 14, 16, 19, 22, 23, 23

11 and 23  
are the two  
modes  
because  
they  
appear the  
most

(Count them to check you have the same amount of numbers)

# The Mode

The mode is the most frequent value  
*(it appears the most)*

The mode is the value that appears the most

Work out the mode of these numbers

\*It helps if you order the values from smallest to largest.\*

11, 23, 22, 14, 10, 12, 16, 19

*(order them from smallest to largest)*

10, 11, 12, 14, 16, 19, 22, 23

There is  
NO mode in  
this set of  
data!

*(Count them to check you have the same amount of numbers)*





# The Median

The median is the middle number.

Put the numbers in order from the smallest to the largest.

Cover up one number on each end until you get to the middle.

2, 2, 5, 6, 7, 8, 9

# The Median

The median is the middle number.

The median is the value that appears in the middle...  
It helps if you order the values from smallest to largest.

2, 3, 4, 1, 2, 3, 5, 6, 3, 3, 1

*(order them from smallest to largest and cross them out until you reach the middle)*

~~1~~, ~~1~~, ~~2~~, ~~2~~, ~~3~~, 3, ~~3~~, ~~3~~, ~~4~~, ~~5~~, ~~6~~

3 is the median because it appears in the middle

*(Count them to check you have the same amount of numbers)*

# The Median

The median is the middle value  
*(it appears in the middle)*

The median is the value that appears in the middle

Work out the median of these numbers

\*It helps if you order the values from smallest to largest.\*

11, 23, 22, 14, 23, 10, 11, 16, 19

*(order them from smallest to largest)*

10, 11, 11, 14, 16, 19, 22, 23, 23

16 is the  
median  
because it  
appears  
the middle

*(Count them to check you have the same amount of numbers)*

# The Median

The median is the middle value  
(it appears in the middle)

The median is the value that appears in the middle

Work out the median of these numbers

\*It helps if you order the values from smallest to largest.\*

11, 23, 22, 14, 23, 14, 10, 11, 16, 19

(order them from smallest to largest)

10, 11, 11, 14, 14, 16, 19, 22, 23, 23

The middle of  
this sequence  
is in-between  
14 and 16 = 15

15 is the  
median

# The Median

The median is the middle value  
(it appears in the middle)

The median is the value that appears in the middle

Work out the median of these numbers

\*It helps if you order the values from smallest to largest.\*

23, 34, 22, 24, 43, 34, 23, 34, 22, 13

(order them from smallest to largest)

13, 22, 22, 23, 23, 24, 34, 34, 34, 43

The middle of  
this sequence is  
in-between  
23 and 24 = 23.5  
23.5 is the  
median

(Count them to check you have the same amount of numbers)



# The Range

The range is the difference between the lowest and the highest value.

Find the highest and lowest values

Subtract the lowest value from the highest

2, 2, 5, 6, 7, 8, 9

$$9 - 2 = 7$$

$$\text{Range} = 7$$



# The Range

The range is the difference between the lowest and the highest value.

The range is the highest - lowest

Work out the range of these numbers

\*It helps if you order the values from smallest to largest.\*

11, 23, 22, 14, 23, 10, 11, 16, 19

*(order them from smallest to largest)*

$23 - 10 = 13$   
The range is  
13

10, 11, 11, 14, 16, 19, 22, 23, 23

*(Count them to check you have the same amount of numbers)*

# The Range

The range is the difference between the lowest and the highest value.

The range is the highest - lowest

Work out the range of these numbers

\*It helps if you order the values from smallest to largest.\*

20, 32, 45, 23, 24, 54, 23, 50, 60

*(order them from smallest to largest)*

20, 23, 23, 24, 32, 45, 50, 54, 60

$60 - 20 = 40$   
The range is  
40

*(Count them to check you have the same amount of numbers)*

# The Range

The range is the difference between the lowest and the highest value.

The range is the highest - lowest

Work out the range of these numbers

\*It helps if you order the values from smallest to largest.\*

12, 17, 32, 21, 50, 43, 23, 5, 23, 21, 21

*(order them from smallest to largest)*

$50 - 5 = 45$   
The range is  
45

5, 12, 17, 21, 21, 21, 23, 23, 32, 43, 50

The Mean

# The Mean

The mean is the average.

To find the mean, add up all of the values to find a total.

Divide the total by the number of values you have added together

$$\textcircled{2} + \textcircled{2} + \textcircled{5} + \textcircled{6} + \textcircled{7} + \textcircled{8} = 30$$

$$30 \div 6 = 5$$

*The mean is 5*

# The Mean

The mean is the average

To find the mean, add up all of the values to find a total.  
Divide the total by the number of values you have added together  
Work out the mean of these numbers

11, 12, 10

$$10 + 11 + 12 = 33$$

$$33 \div 3 = 11$$

The mean is 11

*(Count them to check you have the same amount of numbers)*

# The Mean

The mean is the average

To find the mean, add up all of the values to find a total.

Divide the total by the number of values you have added together

Work out the mean of these numbers

10, 20, 15, 5

$$5 + 10 + 15 + 20 = 50$$

$$50 \div 4 = 12.5$$

The mean is 12.5

*(Count them to check you have the same amount of numbers)*