Mean, Mode, Median and Range

Range = the difference between the highest and the lowest numbers in a series of numbers

For example:

25 50 75 100 125 150 175

The highest number is 175 and the lowest is 25

The difference is 175 – 25 = 150

Mode = the most common number in a range of numbers

For example:

3 4 4 6 6 6 7

The number 6 is the most common number and so the mode is 6

Mean = to calculate the mean value of a set of figures we add up all of the figures and divide by the number of figures in the set.

For example:

6 4 8 3 5 10

6 + 4 + 8 + 3 + 5 + 10 = 36

There are 6 numbers in the set, so the mean is 36 ÷ 6 = 6

Median – the middle number in a set of numbers when they are written in order

For example:

3 4 5 6 6

The number 5 is half way in the list and so it is the median number

HD1/L1.3 Find arithmetical average (mean) for a set of data. **HD1/L1.4** Find range for a set of data. **HD1/L2.3** Find mean, mode & median, and use them as appropriate to compare two sets of data. **HD1/L2.4** Find the range and use it to describe the spread within sets of data.

Kindly contributed by Valerie Hitchcox, South Leicestershire College valerie@slcollege.ac.uk

Range

is the difference between the highest and the lowest numbers in a series of numbers

For example:

25 50 75 100 125 150 175

The highest number is 175 and the lowest is 25.

The difference is 175 – 25 = 150

Mode

is the most common number in a set of numbers

For example:

3 4 4 6 6 6 7

The number 6 is the most common number and so the mode is 6

** It is possible to have more than one mode for a set of numbers*

Mean

To calculate the mean value of a set of figures we add up all of the figures and divide by the number of figures in the set.

For example:

6 4 8 3 5 10

6 + 4 + 8 + 3 + 5 + 10 = 36

There are 6 numbers in the set, so the mean is 36 ÷ 6 = 6

HD1/L1.3 Find arithmetical average (mean) for a set of data. **HD1/L1.4** Find range for a set of data. **HD1/L2.3** Find mean, mode & median, and use them as appropriate to compare two sets of data. **HD1/L2.4** Find the range and use it to describe the spread within sets of data. Kindly contributed by Valerie Hitchcox, South Leicestershire College valerie@slcollege.ac.uk

Median

is the middle number in a set of numbers when they are written in order

For example:

3 4 5 6 6

The number 5 is half way in the list

and so it is the median number