

Here's an interesting set of five numbers:



The mean, mode, median and range are all **7**.

Can you find other sets of five positive whole numbers where:

Mean = Median = Mode = Range



Can you find sets of five positive whole numbers that satisfy the following properties?

Mode < Median < Mean

Mode < Mean < Median

Mean < Mode < Median

Mean < Median < Mode

Median < Mode < Mean

Median < Mean < Mode

Not all of these can be satisfied by sets of five numbers!
Can you explain why?

Show that some of them can be satisfied with sets of just four numbers.
Show that all of them can be satisfied with sets of six numbers.