

Averages from data sets – calculator allowed

Find the mean, median, mode and range of each of the following data sets

2, 5, 7, 2, 4, 8, 11	3, 1, 5, 3, 1
2, 5, 8, 5, 2, 5, 9, 2	4, 1, 5, 9, 7, 6, 4, 3, 2, 9, 7, 4
101, 104, 110, 117, 120, 103, 125	1001, 1004, 1110, 1030, 1250, 1005

Problem 1: By finding the mean of the following test scores, evaluate which student you think is better at the subject:

Person A: 77, 65, 43, 88, 72

Person B: 80, 81, 82, 41, 17

Person C: 3, 5, 35, 99, 82

Explain carefully how conclusive you think your evaluation is

Problem 2: By finding the mean and the range of the following times to run a particular distance, explain carefully which you would choose to represent the school in a running competition

Person A: 12.3, 13.4, 11.1, 15.2, 12.9, 13.2, 15.6

Person B: 13.2, 12.9

Person C: 15.1, 13.1, 10.9, 17.1, 11.2, 12.9, 15.3

Person D: 12.2, 13.1, 14.2, 13.1, 12.9, 20.1, 20.2, 11.1

Now find the median time for each person above and see if this provides extra support for your conclusion or whether you now think you should pick a different person

Problem 3: missing numbers

What number would you need to add to 4, 6, 6 and 3 to make a mean of 4?

What number would you need to add to 4, 5, 8, 2, 20 to make a mean of 6?

Can you think of three numbers which have a mode of 3 and a mean of 4?

Is it possible to have two numbers with a median of 4 and a range of 3?

How many sets of 4 numbers can you think of which have a mean of 4?

Is it possible to have three numbers with a range of 2, and mode of 3 and a mean of 4?

Can you think of four different numbers which have a range of 8 and a mean of 0?