Fluency

Find the mean of the following sets of data:

(Add them all up and divide by how many there are)

A. 8, 3, 52, 48, 7, 78

B. 8, 9, 12, 15, 21, 22

C. 24, 27, 21, 25, 28

D. 150, 155, 157, 163, 170

Misconception

Jess thinks that the mean average of these numbers is 7. Do you agree or disagree with her? Show your reasoning.

5, 12, 8, 3, 2, 4, 1

What had Jess done incorrectly to get an answer of 7?

Reasoning

Josie and her brothers and sisters measured their heights and found the mean average. The mean was 150cm. Josie forgot her height. Can you work out the missing height?

150cm, 170cm, 140cm, 155cm, _____

Keywords

Data – pieces of information.

Mean – all of the values added together and then divided by the total number of values.

Application

Sarah is studying for her GCSEs and has a part-time job. By law, she can only work 16 hours a week over the course of a four week period. These are her total hours worked from the last four weeks: 17hrs, 25hrs, 8 hrs and 14hrs. Has she gone over the limit?

Problem Solving

6, 2, 8, 10, 5, ____

Here as a set of five numbers with one missing. What would the last number need to be to give a mean of:

A. 6?   B. 7?

Real-life Application

In industry, designers use the average height of people of different ages to calculate how big to make their clothes.

The transport service has to know the average size of the populations bottoms to know how big to make bus seats!

Your teacher may use your average homework mark to decide on your grade at the end of the term.