

Reversing the Mean

Sometimes when working with averages, you are told the value of the mean and expected to use this to solve problems.

Remember

$$\text{Mean} = \text{Total} \div \text{Count}$$

or

$$\text{Mean} = \frac{\text{Total}}{\text{Count}}$$

This can be rearranged to give

$$\text{Total} =$$

Remembering this will allow you to answer B grade averages questions such as:

1. Three girls have a mean age of 15. Sheila joins the group and the mean age is now 16. How old is Sheila?

2. Class A and Class B have 20 and 30 students respectively. The mean maths mark of Class A was 68 and the mean of Class B was 75. What was the mean mark across the two classes?

3. The mean age of 10 boys and 20 girls is 16. If the mean age of the boys is 17, what is the mean age of the girls?

4. Write down five numbers so that the median is 8, the mode is 8 and the range is 8 and the mean is 5.8.

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5. In April the mean rainfall in Tenby was 65mm. During the first seven days the mean rainfall was 120mm. Calculate the mean rainfall for the rest of the month. What do these values tell you about the weather pattern in Tenby in April?