## K Edication Centre

## GCSE Maths - Higher

Statistical diagrams and Averages - 2

Assignment Questions
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## Statistical diagrams and Averages - 2

Q 1: A list of nine numbers has a mean of 9.6. What number must be added to the list to give a new mean of 10 ?

Q2: A dance group of 17 teenagers had a mass of 44.5 kg . To enter a competition, there needs to be 18 people in the group with an average mass of 44.4 kg or less. What is the maximum mass that the $18^{\text {th }}$ person could be?

Q3: The table shows numbers of sweets in some tubes, but a coffee stain has deleted one of the figures.

The mean number of sweets in a tube is known to be 24.5 . Work out the missing number in the table.

| Number of sweets | Frequency |
| :---: | :---: |
| 40 | 5 |
| 20 |  |
| 35 | 2 |
| 36 | 1 |
| 36 | 1 |

Work out the missing number in the table.
Q4: One hundred light bulbs were tested by the manufacturer to see whether the average life span of the bulb were over 200 hours. The table summarises the results.

Life span (h) $150<h \leq 175 \quad 175<h \leq 200 \quad 200<h \leq 225 \quad 225<h \leq 250 \quad 250<h \leq 275$ hours

| Frequency | 24 | 45 | 18 | 10 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Find : a) Modal length of light bulb lasts b) Percentage of bulb last more than 200 hrs c) Mean life span of light bulbs.

