

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 18th 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	XIO	
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) hours	150 < h ≤ 175	175 < h ≤ 200	200 < h ≤ 225	225 < h ≤ 250	250 < h ≤ 275
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.