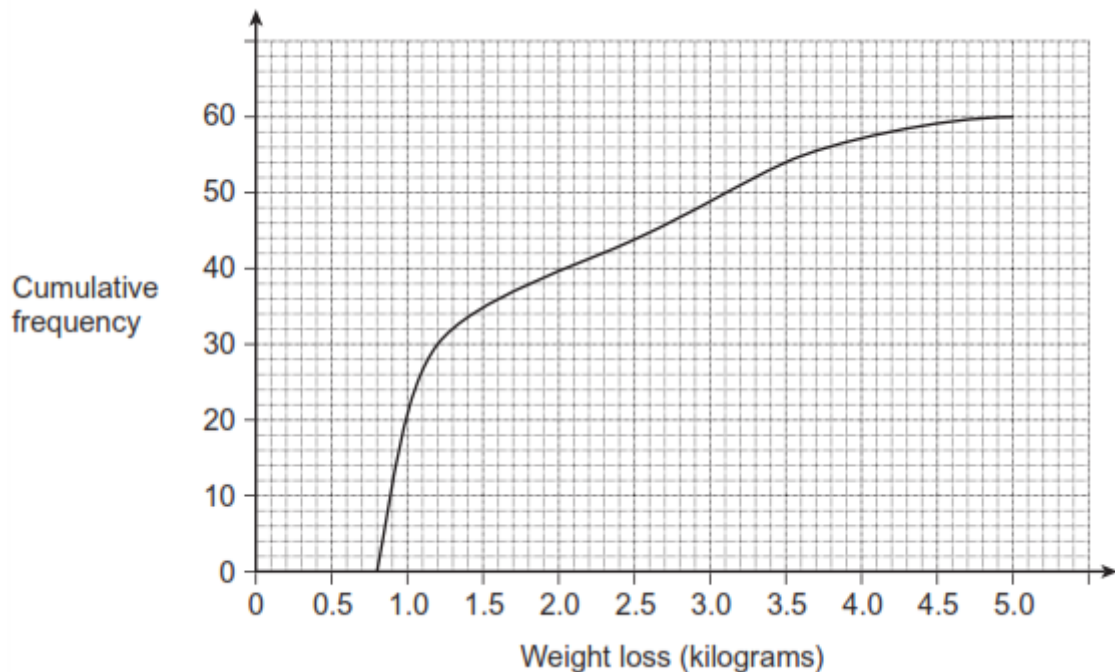**Problem of the Week: Week 3 (Sum2): Year 10: Statistics: Averages, charts and calculations**

- interpret and construct tables and line graphs for time series data
- **{construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use}**

Join the Gym

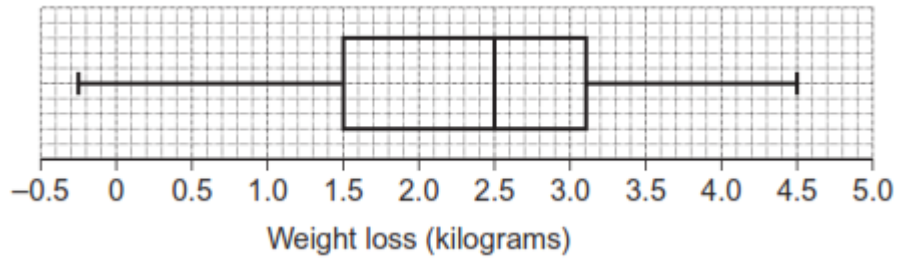Two groups of people are trying to lose weight.

(a)   Group A join a gym.
        The graph shows information about their weight loss after one month.

(i)   How many people are in group A?

(ii)   Does everyone in group A lose weight?
        Write down how you decide.

(b)   Group B follow a diet.

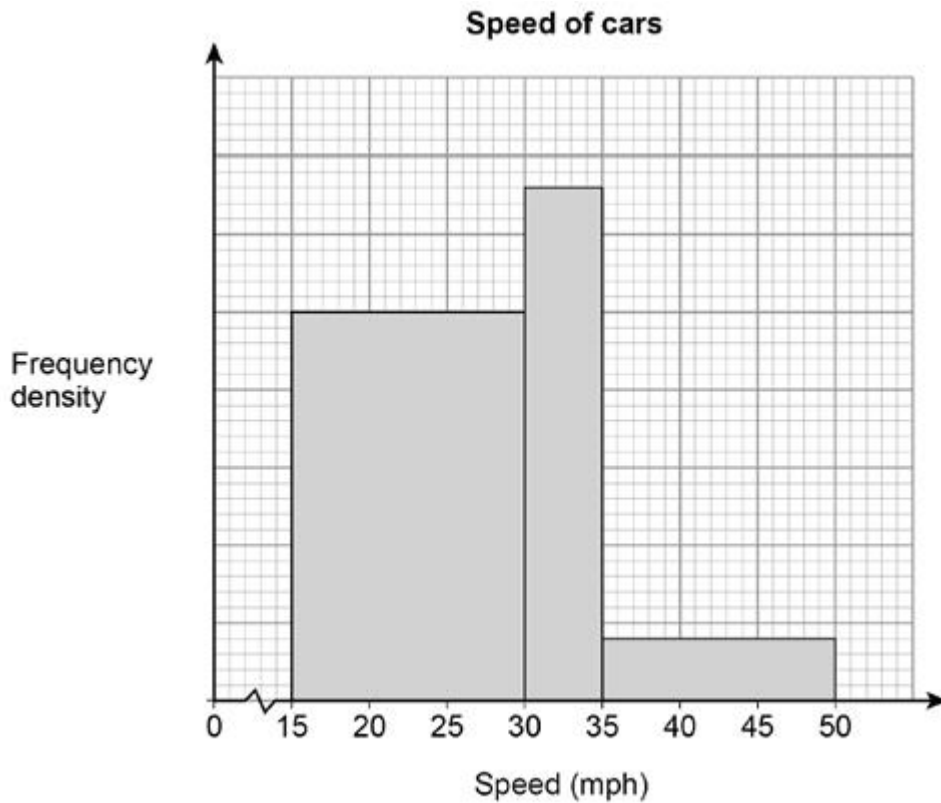The box plot shows information about their weight loss after one month.

Weight loss (kilograms)

Does everyone in group B lose weight?
Write down how you decide.

(c)   Compare the weight loss of group A with group B.

Speeding Cars

The histogram shows information about the speed of cars as they pass a checkpoint.

The scale on the frequency density axis is missing.

Speed of cars

The histogram shows information about 480 cars.

(a) How many cars does the first bar represent?

(b) Cars with a speed greater than 40 mph are over the speed limit.

Use the histogram to estimate the number of cars that are over the speed limit.

HIAS HOME LEARNING