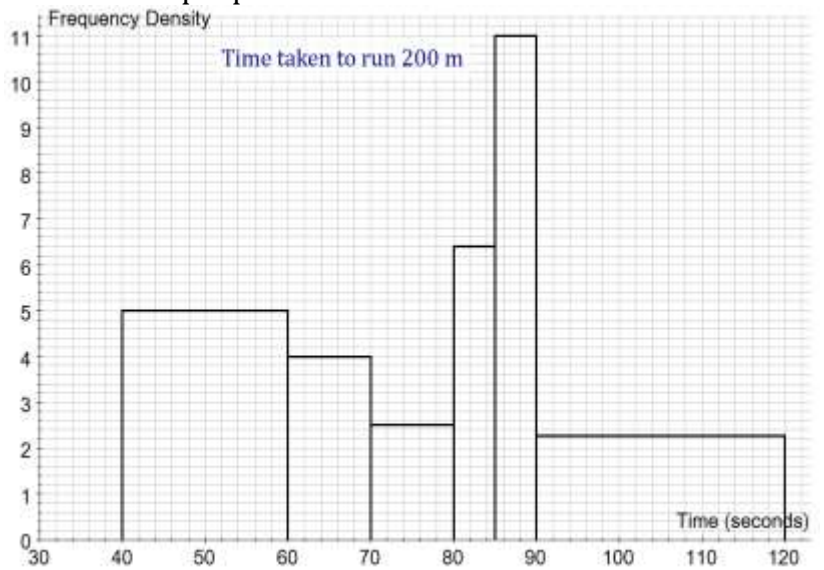


Interpreting Histograms

$$\text{Frequency} = \text{Freq. Density} \times \text{Class Width}$$

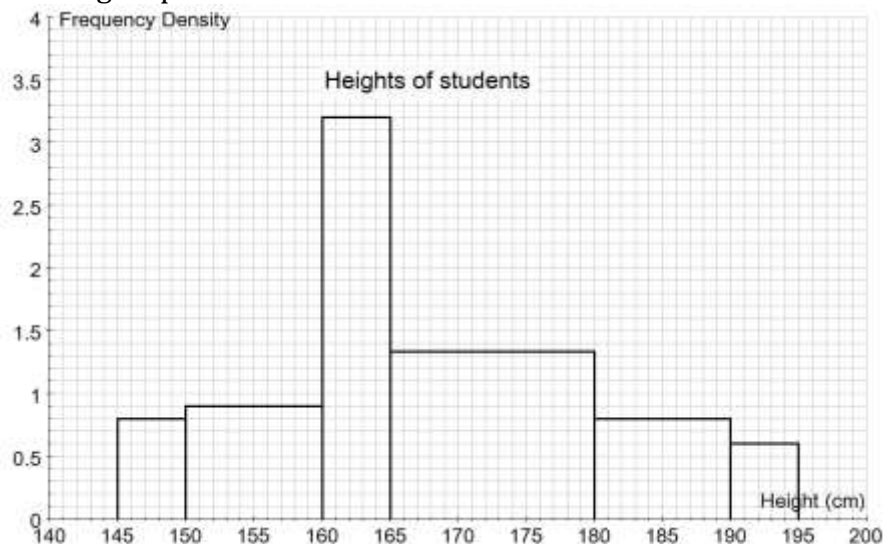
Q1. This frequency table shows the time taken for 320 people to run 200 m.

- a) Estimate how many people ran between 60 and 70 seconds.
- b) Estimate how many people ran between 80 and 90 seconds.
- c) Estimate how many people took more than 78 seconds to complete 200 m.

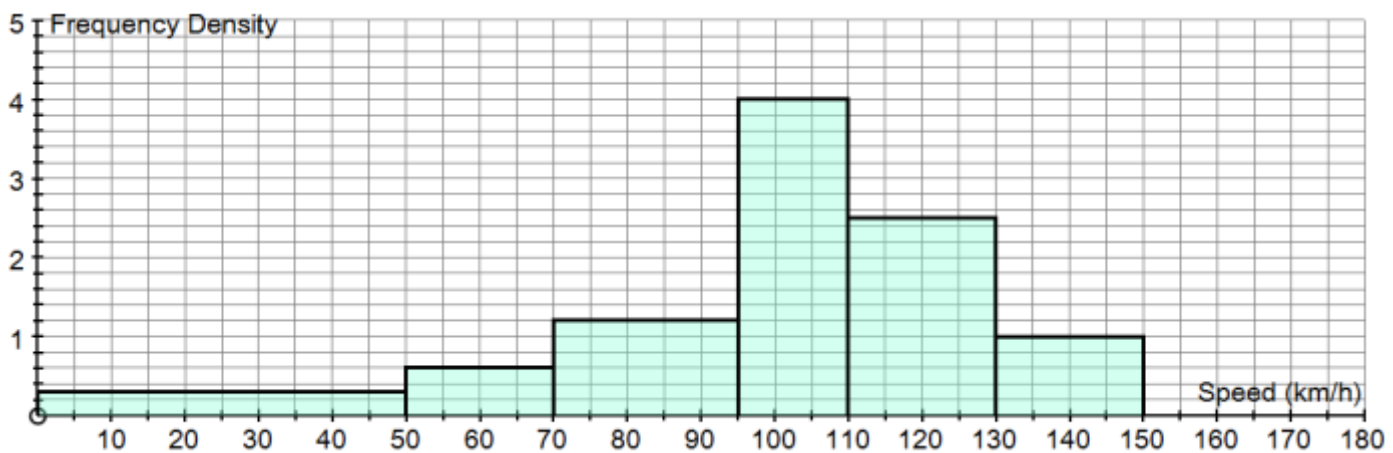


Q2. This histogram shows the heights for a group of students.

Construct a frequency table for this data to show how many students are included in each class interval.



Q3. A survey was carried out to find the speeds of cars passing a particular point on the M6. The histogram illustrates the results of the survey.



Work out an estimate for the mean average speed of the cars on this part of the M6.

Interpreting Histograms

Solutions

Q1.

a) 40 people

b) 87 people

c) 160 people

Q2.

Height, h (cm)	Frequency
$145 \leq h < 150$	4
$150 \leq h < 160$	9
$160 \leq h < 165$	16
$165 \leq h < 180$	20
$180 \leq h < 190$	8
$190 \leq h < 195$	3

Q3.

Mean Estimate = 99 km/h