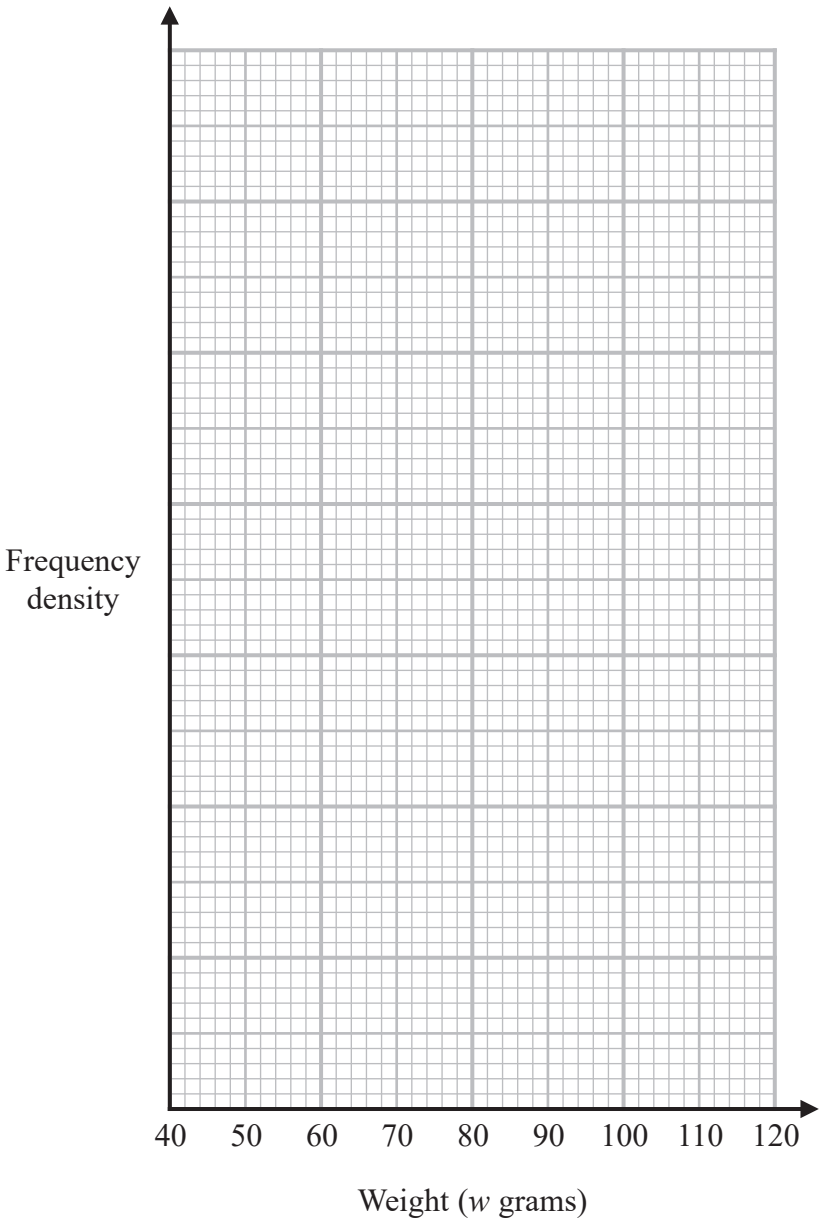
1 The table shows information about the weights, in grams, of some potatoes.

Weight (w grams)	Number of potatoes
$50 < w \leqslant 70$	20
$70 < w \leqslant 80$	50
$80 < w \leqslant 90$	60
$90 < w \leqslant 110$	30

On the grid, draw a histogram for this information.

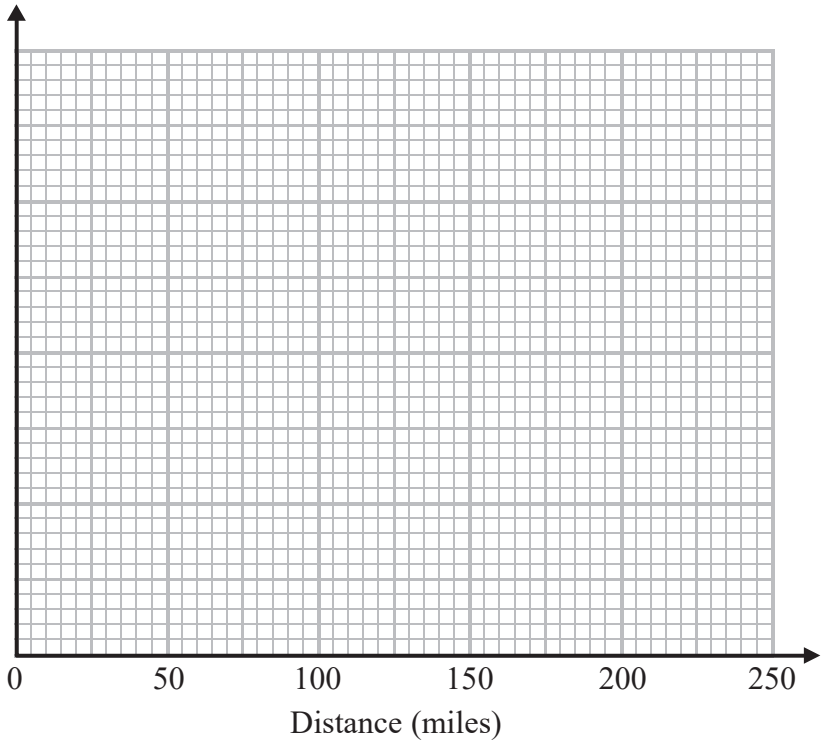


(Total for Question 1 is 3 marks)

2 The table shows information about the distances 570 students travelled to a university open day.

Distance (d miles)	Frequency
$0 < d \leqslant 20$	120
$20 < d \leqslant 50$	90
$50 < d \leqslant 80$	120
$80 < d \leqslant 150$	140
$150 < d \leqslant 200$	100

(a) Draw a histogram for the information in the table.



(3)

(b) Estimate the median distance.

..... miles

(2)

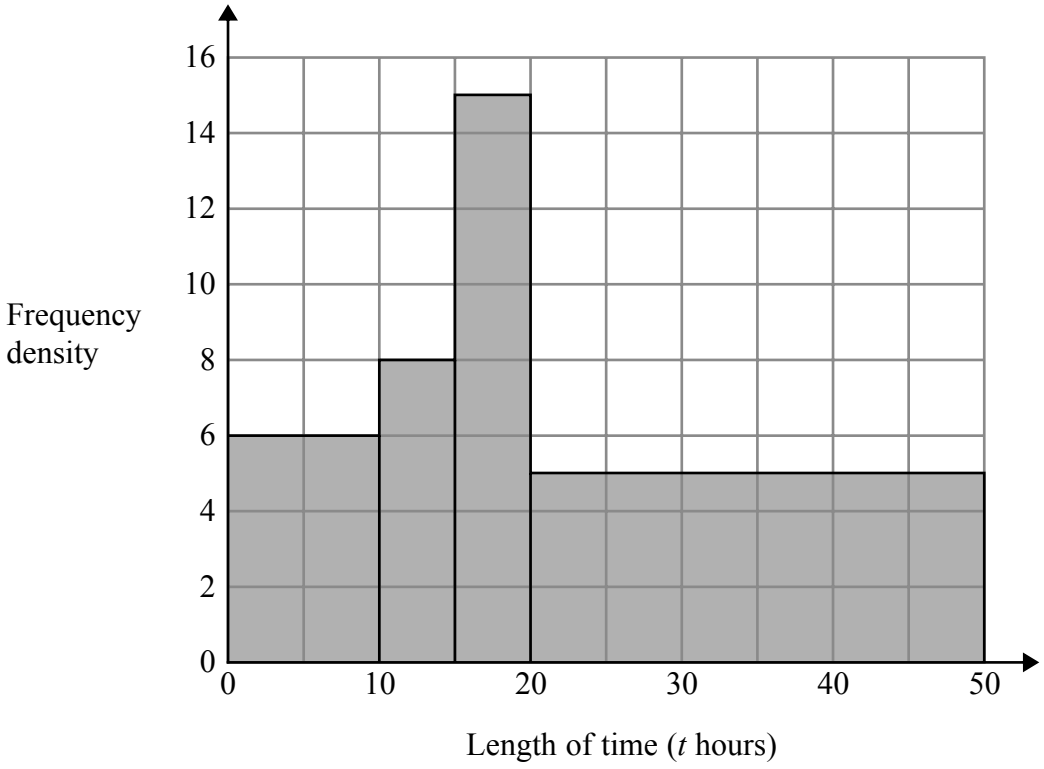
(Total for Question 2 is 5 marks)

3 Bhavna recorded the lengths of time, in hours, that some adults watched TV last week.

The table shows information about her results.

Length of time (t hours)	Frequency
$0 \leqslant t < 10$	6
$10 \leqslant t < 15$	8
$15 \leqslant t < 20$	15
$20 \leqslant t < 40$	5

Bhavna made some mistakes when she drew a histogram for this information.



Write down **two** mistakes Bhavna made.

1 .....

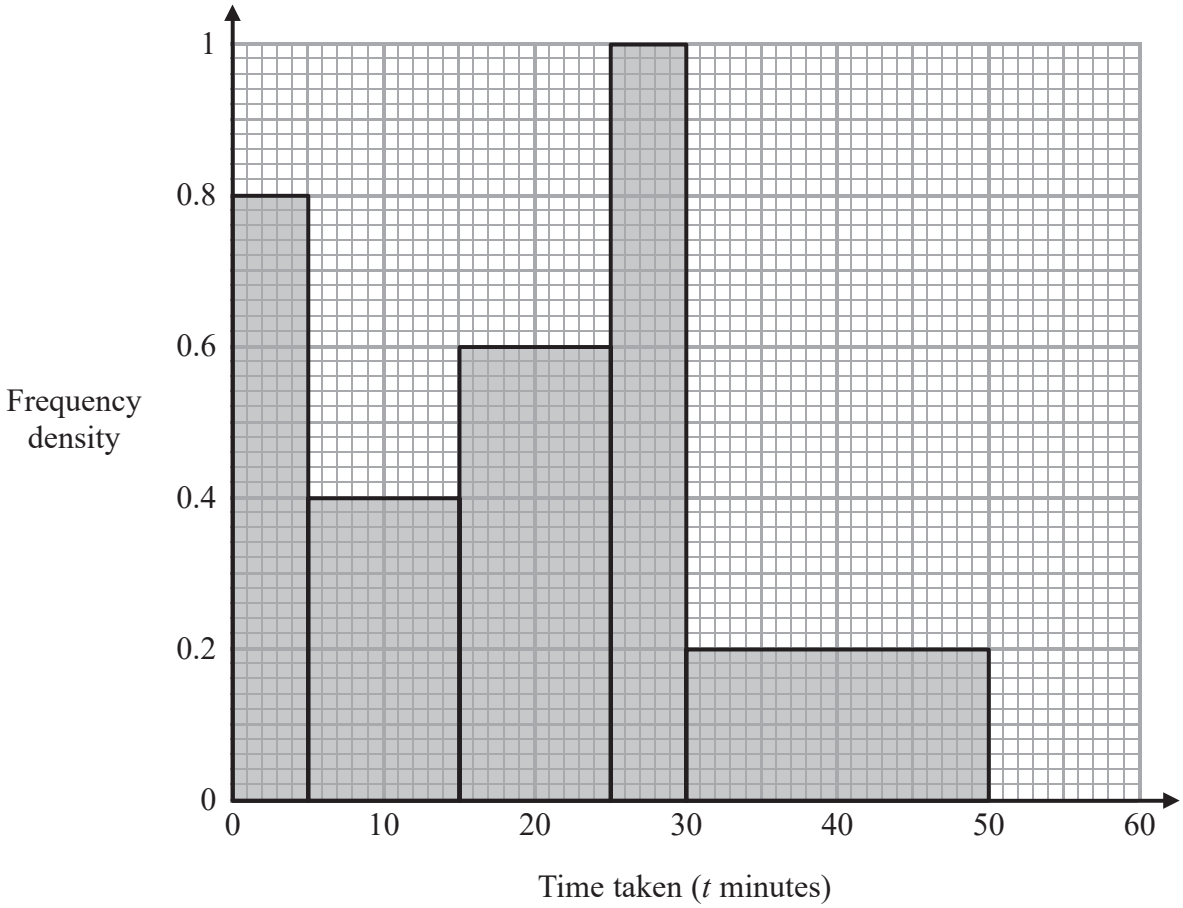
.....

2 .....

.....

(Total for Question 3 is 2 marks)

4 The histogram shows information about the times taken by some students to finish a puzzle.



(a) Complete the frequency table for this information.

Time taken (t minutes)	**Frequency**
$0 < t \leqslant 5$	4
$5 < t \leqslant 15$	
$15 < t \leqslant 25$	
$25 < t \leqslant 30$	
$30 < t \leqslant 50$	

(2)

(b) Find an estimate for the lower quartile of the times taken to finish the puzzle.

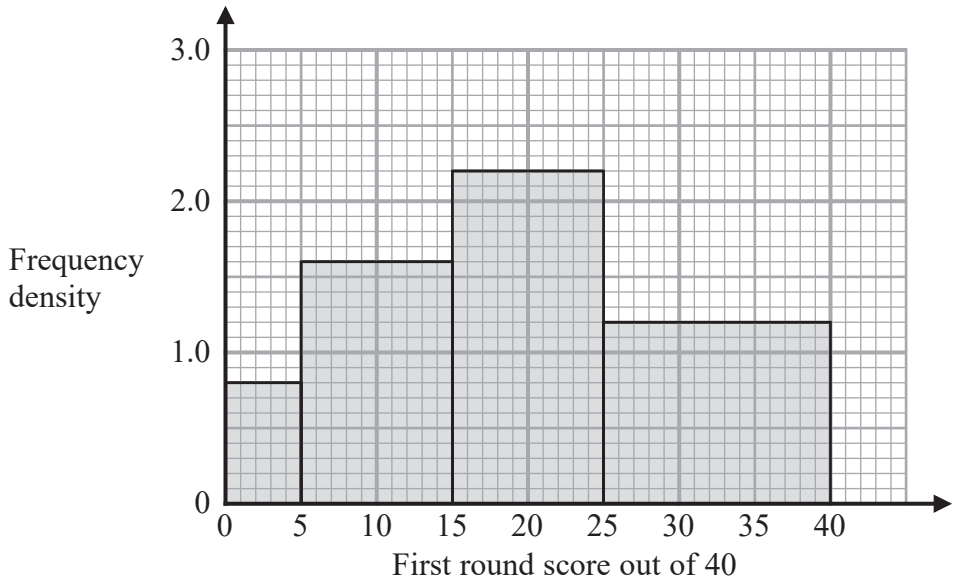
..... minutes

(2)

(Total for Question 4 is 4 marks)

5 Some people took part in the first round of a competition.

The histogram gives information about the scores of these people in the first round.



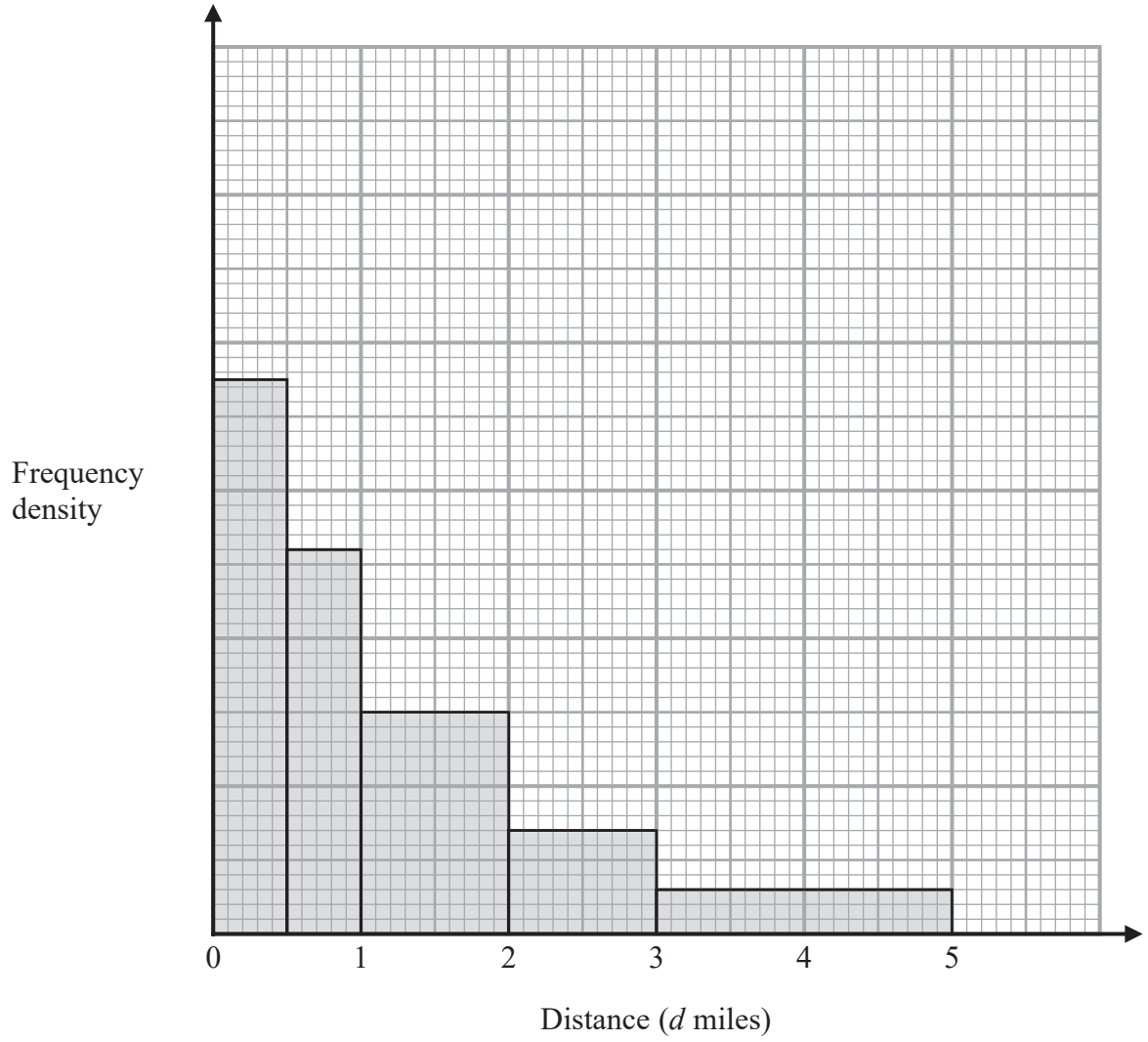
20% of the people got a score high enough for them to qualify for the second round.

Work out an estimate for the score needed to qualify for the second round.
You must show all your working.

.....

(Total for Question 5 is 4 marks)

6 The histogram below shows information about the distances, in miles, that some Year 11 student live from school.



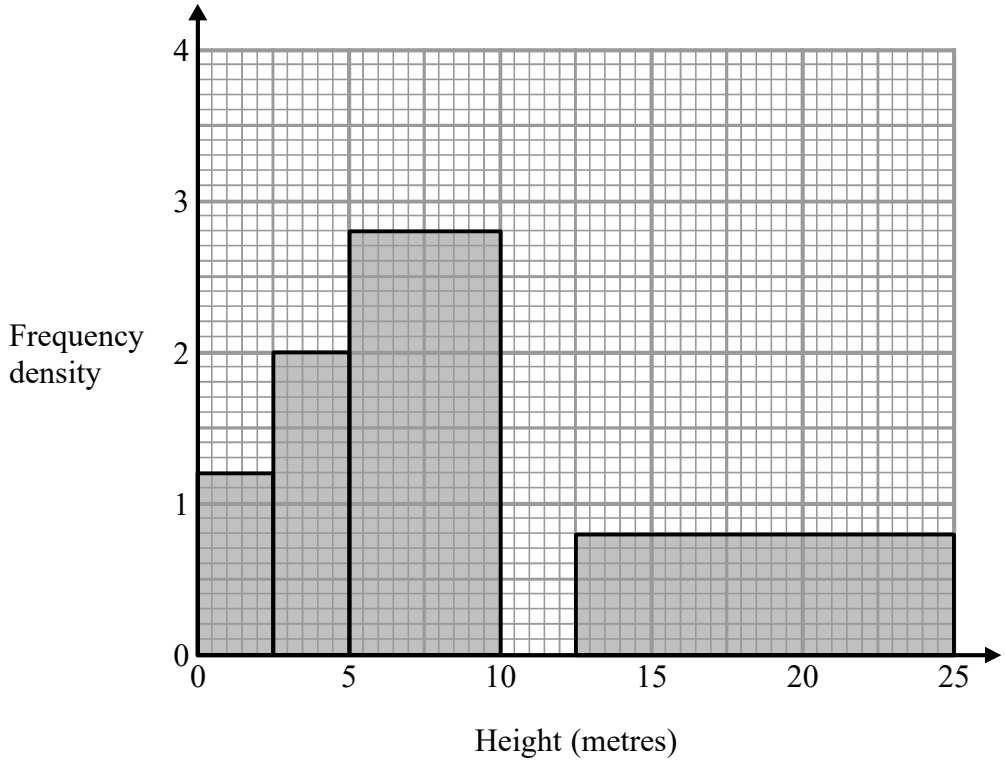
The number of Year 11 students who live between 1 and 2 miles from school is n.

Find an expression, in terms of n, for the number of Year 11 students who live between 3 and 5 miles from school.

.....

(Total for Question 6 is 2 marks)

7 The histogram gives information about the heights, in metres, of the trees in a park.
The histogram is incomplete.

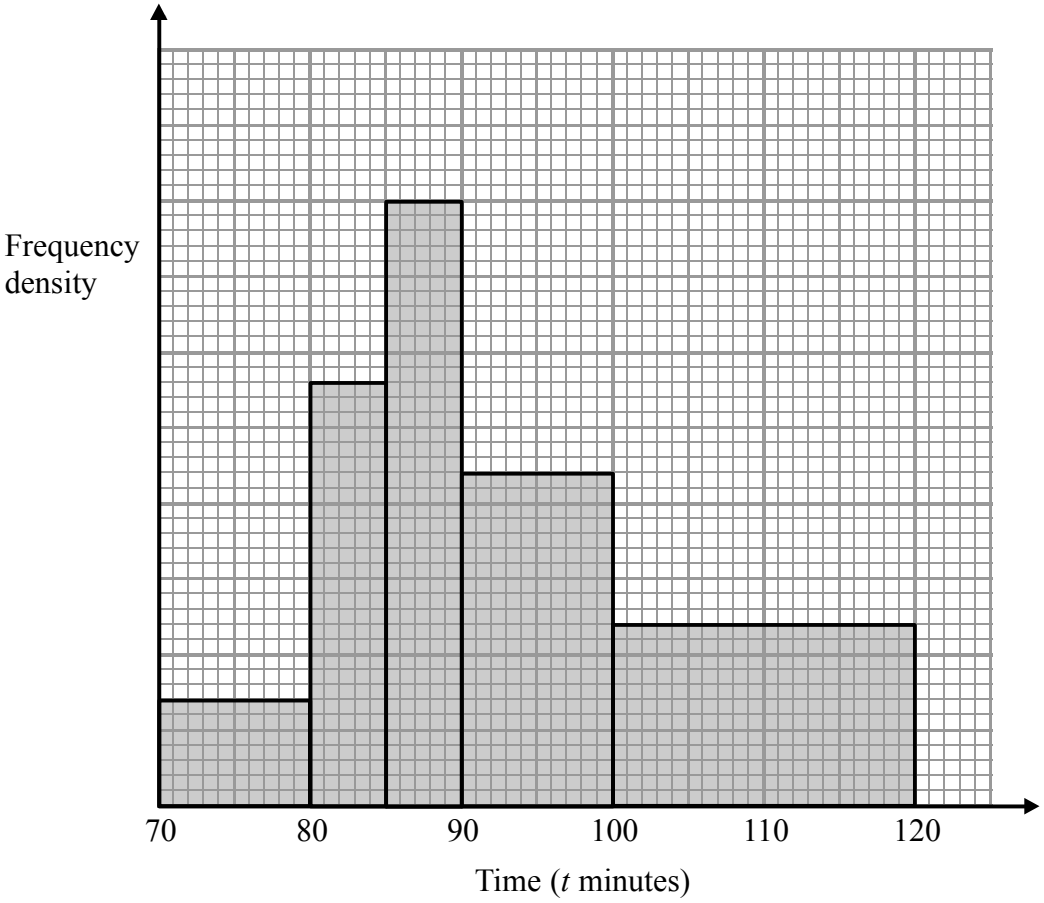


20% of the trees in the park have a height between 10 metres and 12.5 metres.
None of the trees in the park have a height greater than 25 metres.

Complete the histogram.

(Total for Question 7 is 3 marks)

8 The histogram shows information about the time taken by cyclists to finish a cycle race.



7 cyclists took 80 minutes or less to finish the race.

(i) Work out an estimate for the number of cyclists who took more than 105 minutes to finish the race.

.....

(ii) Explain why your answer to part (i) is only an estimate.

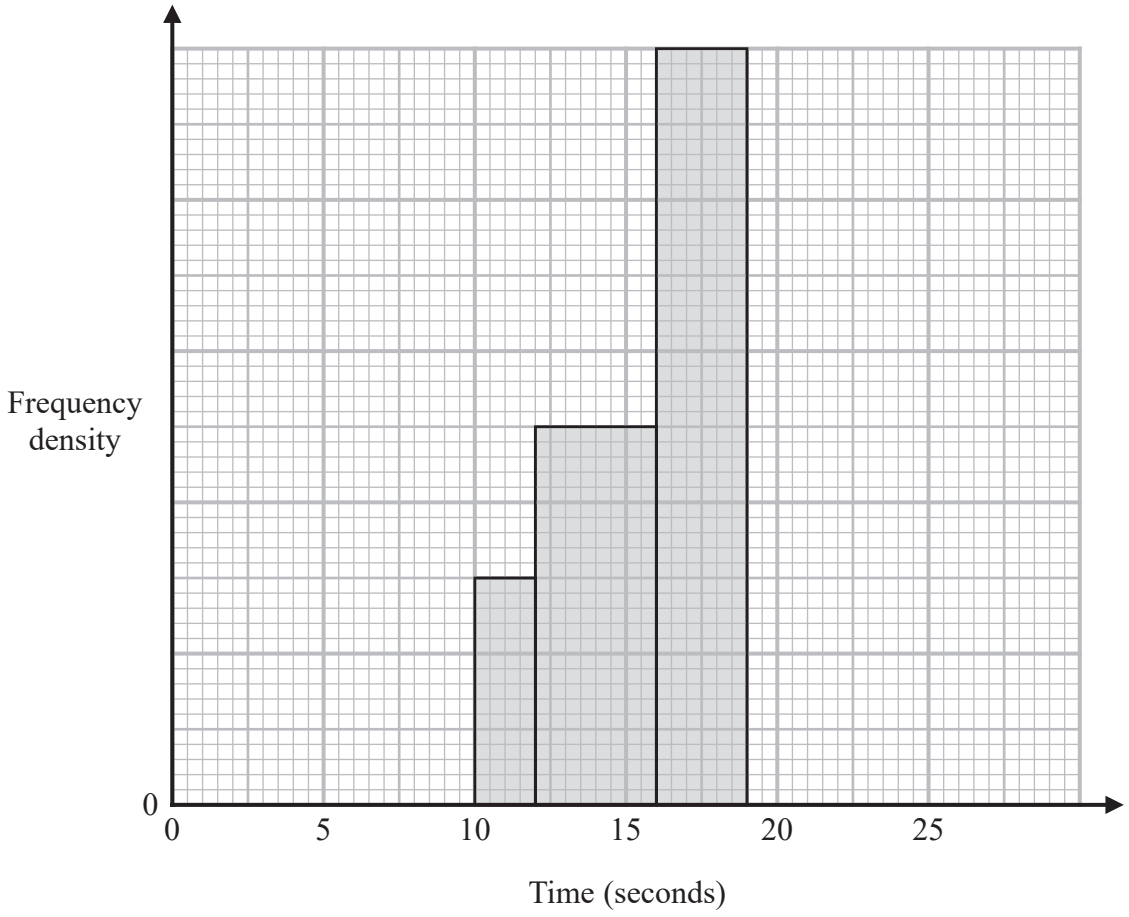
.....

.....

(Total for Question 8 is 4 marks)

9 The incomplete table and the incomplete histogram give information about the times taken by some students to run a race.

Time (t seconds)	Frequency
$10 < t \leqslant 12$	
$12 < t \leqslant 16$	10
$16 < t \leqslant 19$	15
$19 < t \leqslant 21$	9
$21 < t \leqslant 26$	7



None of these students had a time for the race such that $t \leqslant 10$ or $t > 26$

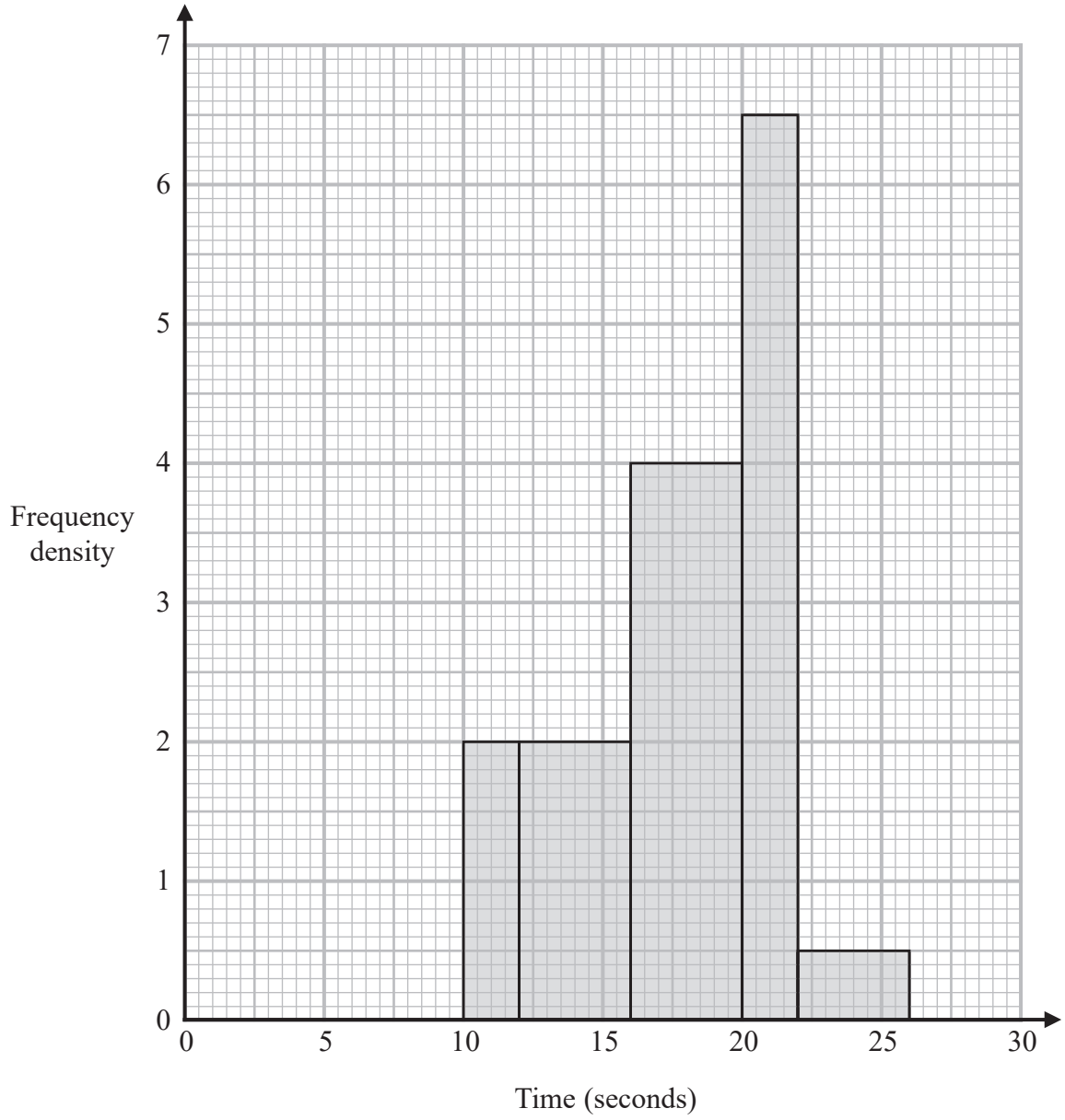
(a) Use the histogram to complete the table.

(1)

(b) Use the table to complete the histogram.

(2)

The histogram below gives information about the times taken by 43 students to run a different race.



(c) Work out an estimate for the median of the times taken by these 43 students to run the race.

..... seconds

(3)

(Total for Question 9 is 6 marks)