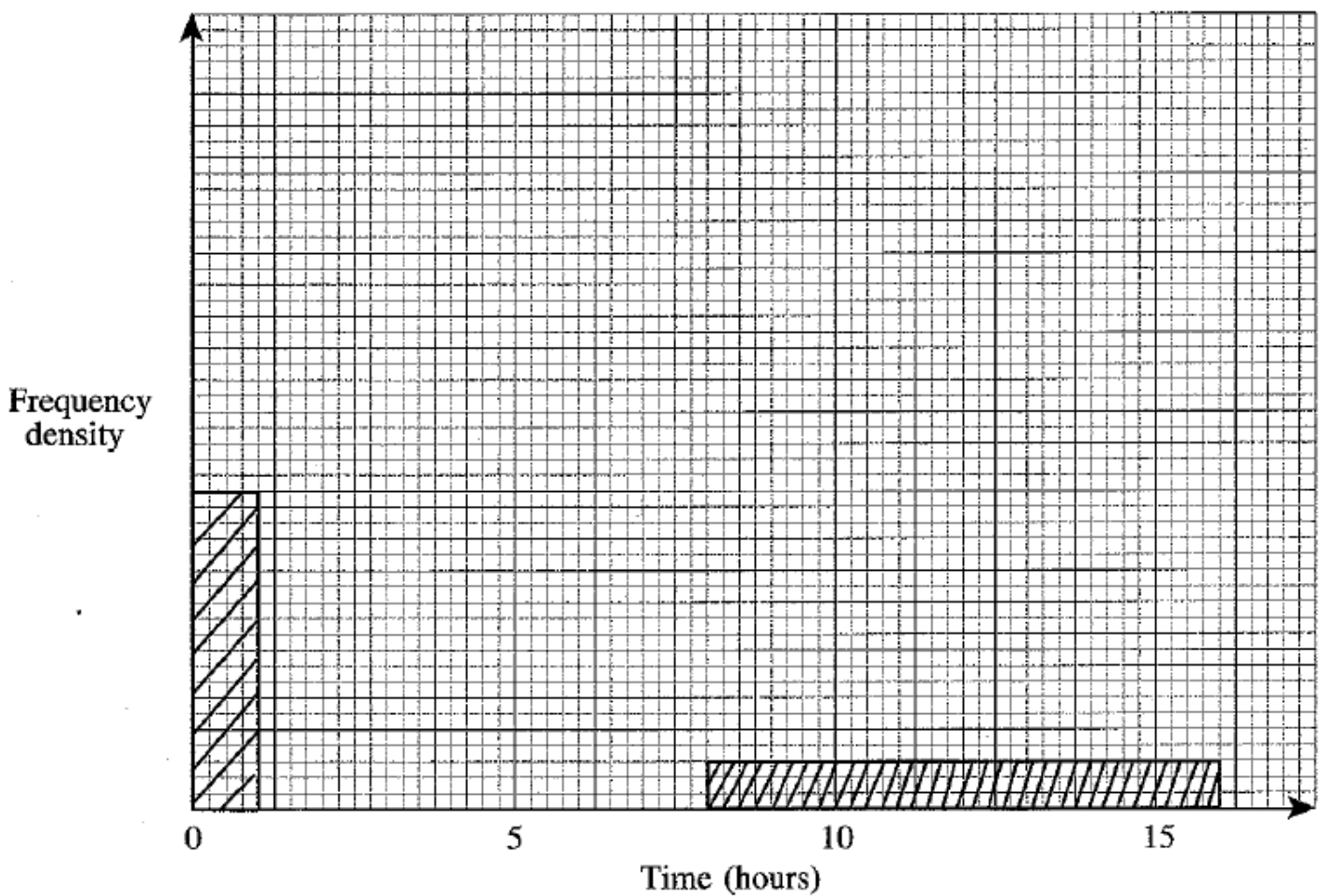


## Past Paper Questions – Histograms

17. The unfinished table and histogram show information about the time, in hours, for which cars were parked in a short stay airport car park.

Time ( $t$ hours)	Frequency
$0 < t \leq 1$	20
$1 < t \leq 2$	28
$2 < t \leq 4$	34
$4 < t \leq 8$	52
$8 < t \leq 16$	



- (a) Use the information in the table to complete the histogram.

(3)

- (b) Use the information in the histogram to complete the table.

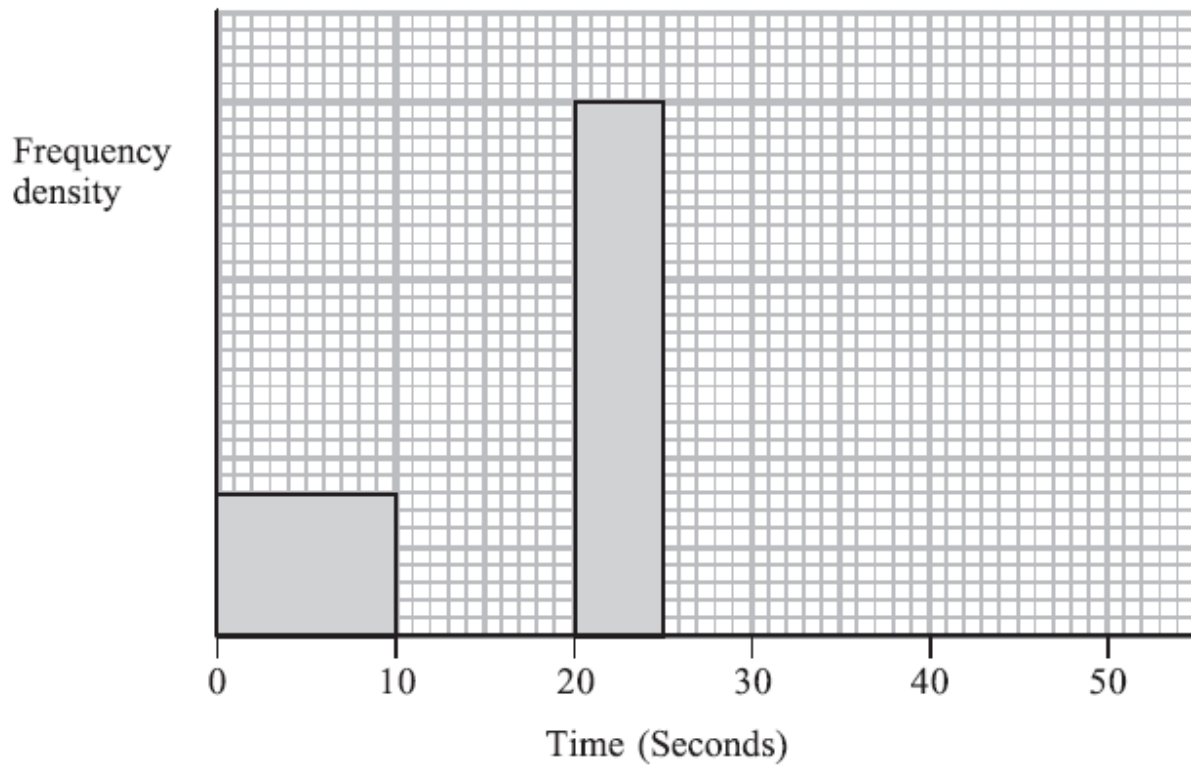
(1)

13. One Monday, Victoria measured the time, in seconds, that individual birds spent on her bird table.

She used this information to complete the frequency table.

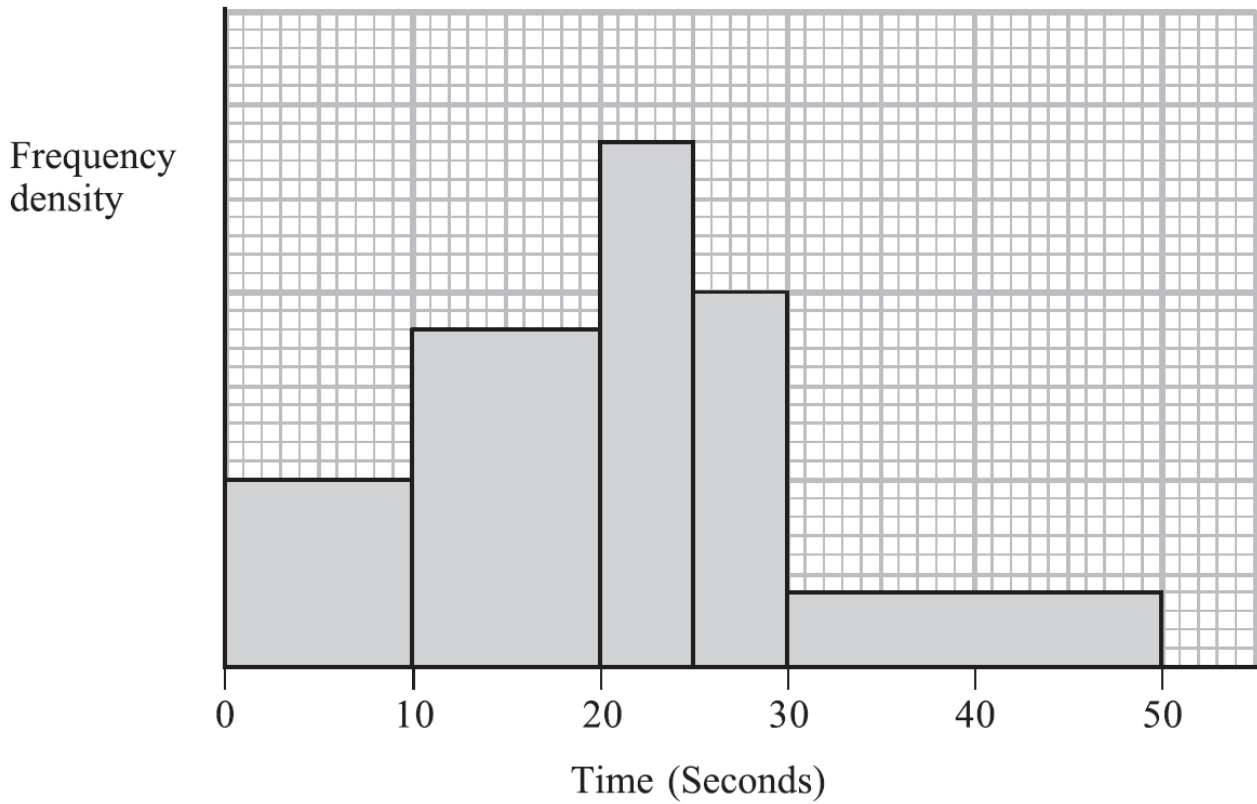
Time ( $t$ seconds)	Frequency
$0 < t \leq 10$	8
$10 < t \leq 20$	16
$20 < t \leq 25$	15
$25 < t \leq 30$	12
$30 < t \leq 50$	6

- (a) Use the table to complete the histogram.



(3)

On Tuesday she conducted a similar survey and drew the following histogram from her results.



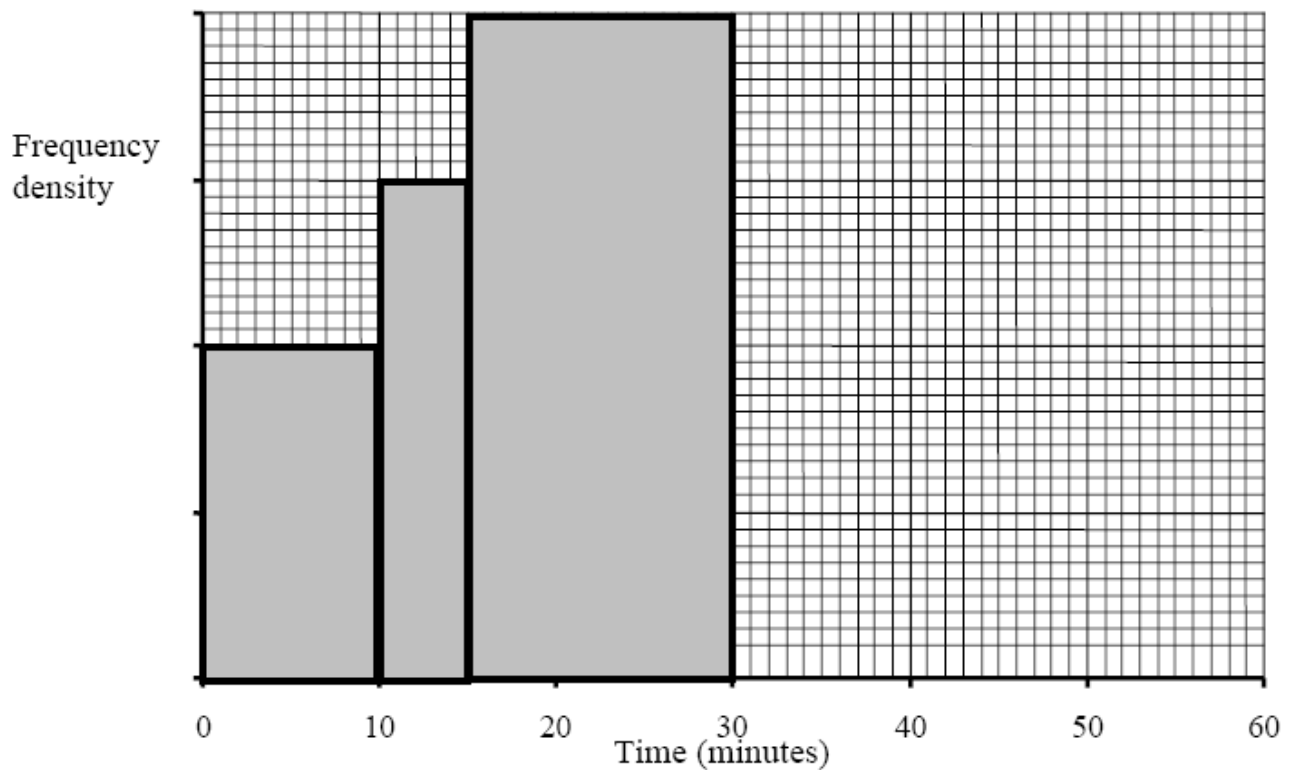
(b) Use the histogram for Tuesday to complete the table.

Time ( $t$ seconds)	Frequency
$0 < t \leq 10$	10
$10 < t \leq 20$	
$20 < t \leq 25$	
$25 < t \leq 30$	
$30 < t \leq 50$	

(2)

15. The table and histogram give information about how long, in minutes, some students took to complete a homework.

Time ( $t$ ) in minutes	Frequency
$0 < t \leq 10$	20
$10 < t \leq 15$	
$15 < t \leq 30$	
$30 < t \leq 50$	62
$50 < t \leq 60$	23



- (a) Use the information in the histogram to complete the table.

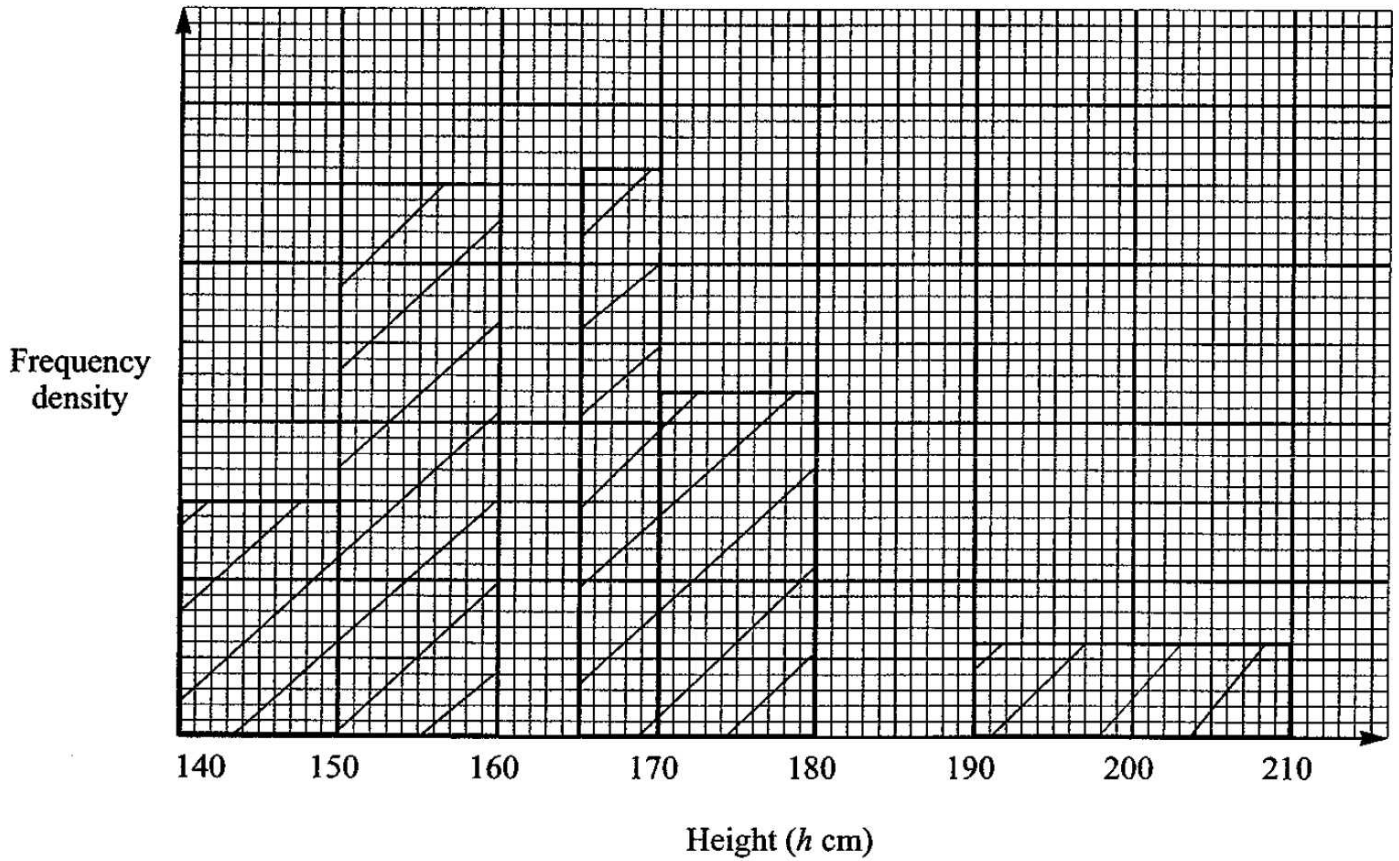
(2)

- (b) Use the table to complete the histogram.

(2)

**(Total 4 marks)**

11. The unfinished histogram and table give information about the heights, in centimetres, of the Year 11 students at Mathstown High School.



Height ( $h$ cm)	Frequency
$140 \leq h < 150$	15
$150 \leq h < 160$	
$160 \leq h < 165$	20
$165 \leq h < 170$	
$170 \leq h < 180$	
$180 \leq h < 190$	12
$190 \leq h < 210$	

(a) Use the histogram to complete the table.

(3 marks)

(b) Use the table to complete the histogram.

(3 marks)

14. A record was kept of the length of time,  $t$  minutes, that computer users were connected to an internet server during a 150 minute period.

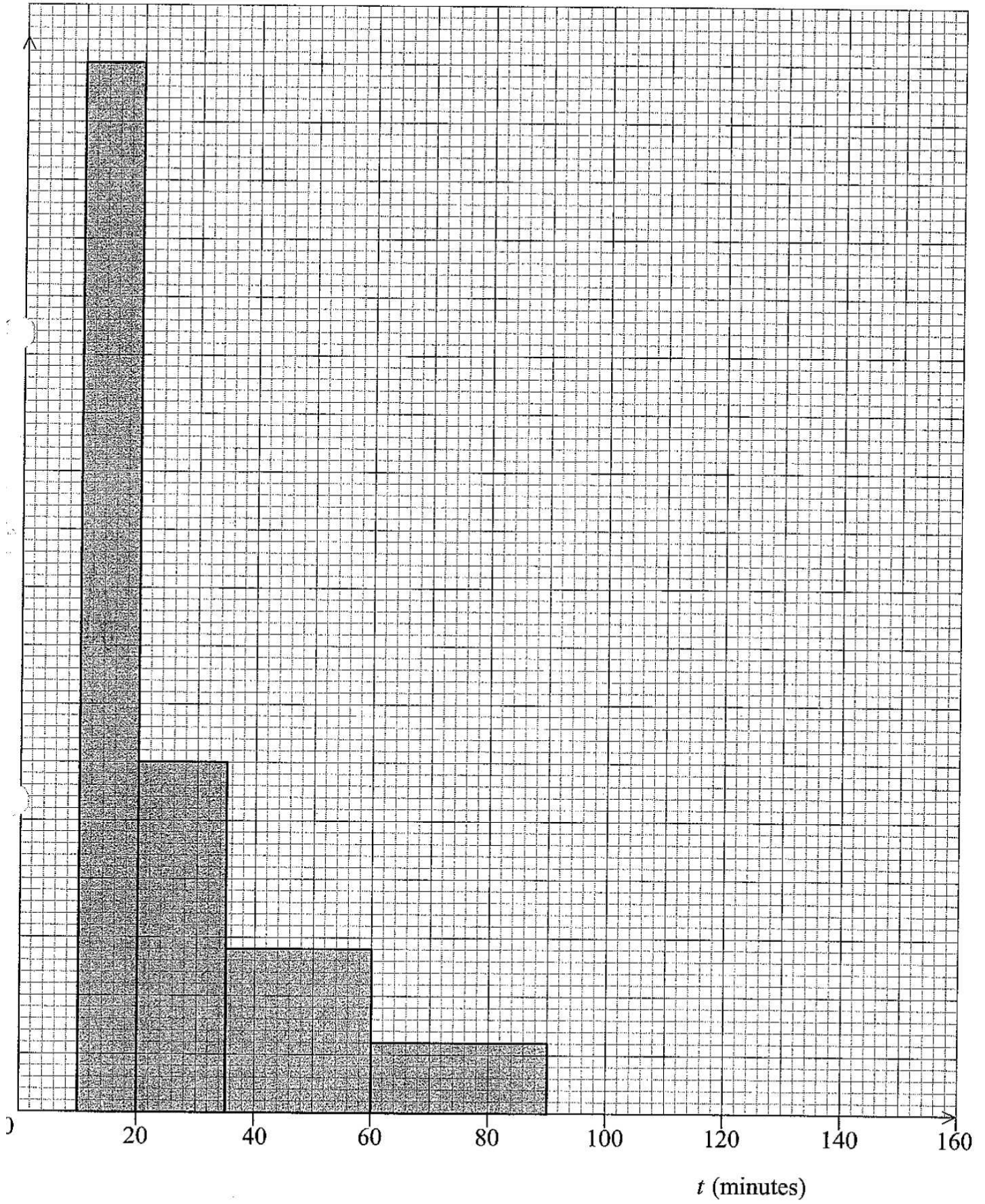
Time ( $t$ ) minutes	Frequency
$0 < t \leq 5$	40
$5 < t \leq 10$	150
$10 < t \leq 20$	
$20 < t \leq 35$	225
$35 < t \leq 60$	
$60 < t \leq 90$	
$90 < t \leq 150$	60

- (a) Use the information in the histogram to complete the frequency table.

(3)

- (b) Use the information in the frequency table to complete the histogram.

Frequency  
density



(3)