

Questions

Q1.

Lyndsey records the number of miles (m) she drives each day for 120 days.

Some information about the results is given in the table.

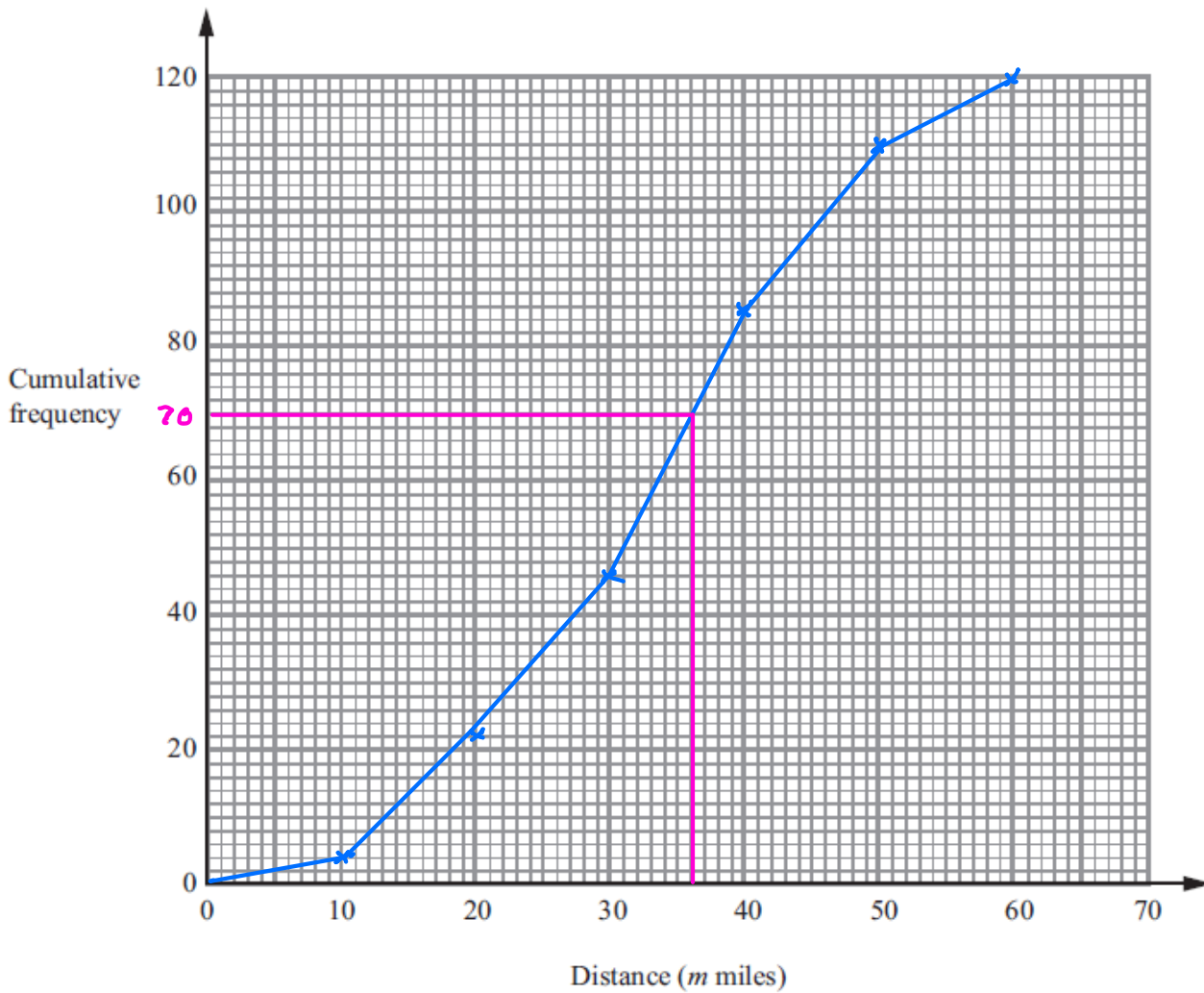
Distance (m miles)	Frequency
$0 < m \leq 10$	4
$10 < m \leq 20$	18
$20 < m \leq 30$	24
$30 < m \leq 40$	40
$40 < m \leq 50$	24
$50 < m \leq 60$	10

(a) Complete the cumulative frequency table.

Distance (m miles)	Cumulative frequency
$0 < m \leq 10$	4
$0 < m \leq 20$	22
$0 < m \leq 30$	46
$0 < m \leq 40$	86
$0 < m \leq 50$	110
$0 < m \leq 60$	120

(1)

(b) On the grid, draw a cumulative frequency graph.



(2)

(c) Work out an estimate for the number of days on which Lyndsey drives more than 36 miles.

$$120 - 70$$

.....50.....days

(2)

(Total for Question is 5 marks)

Q2.

The table shows information about the lengths, in seconds, of 40 TV adverts.

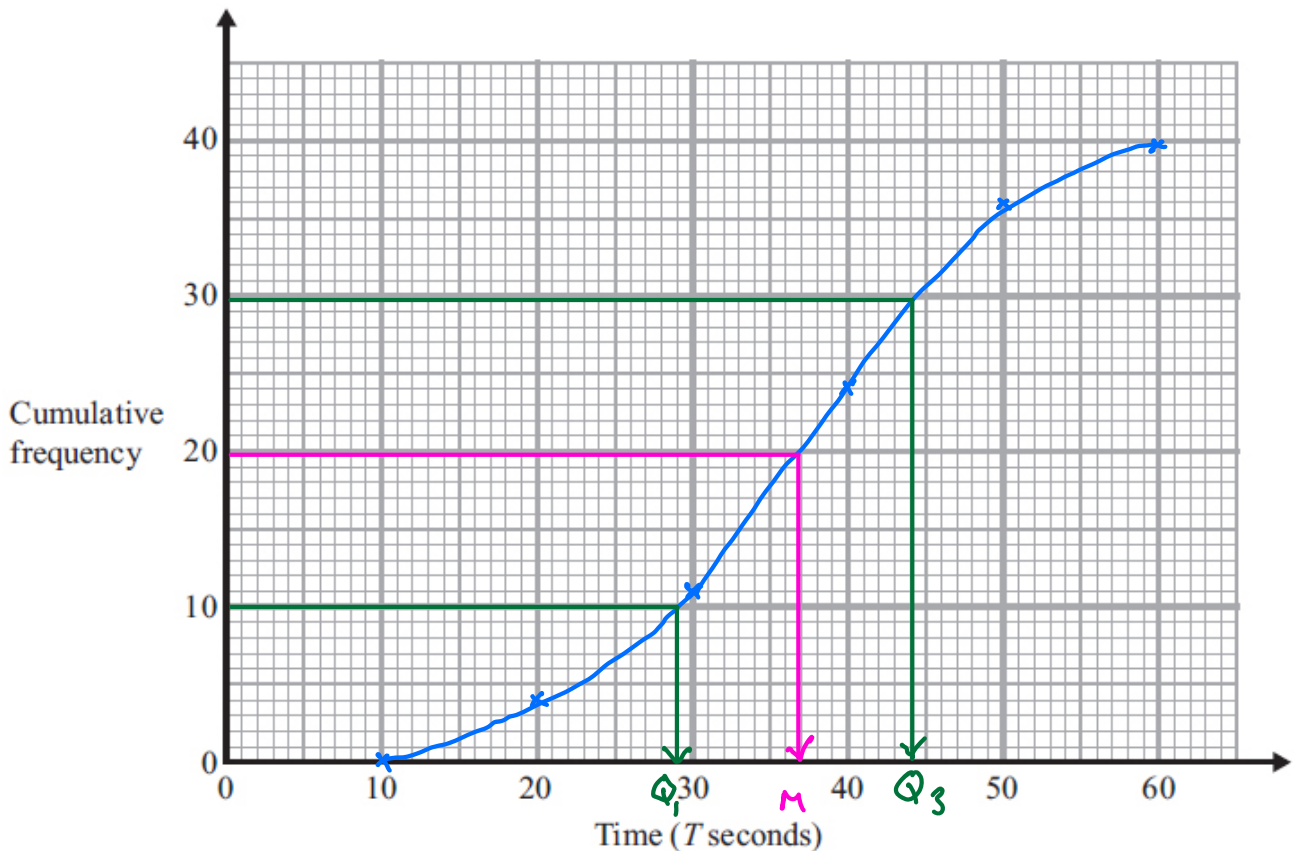
Time (T seconds)	Frequency
$10 < T \leq 20$	4
$20 < T \leq 30$	7
$30 < T \leq 40$	13
$40 < T \leq 50$	12
$50 < T \leq 60$	4

(a) Complete the cumulative frequency table for this information.

Time (T seconds)	Cumulative frequency
$10 < T \leq 20$	4
$10 < T \leq 30$	11
$10 < T \leq 40$	24
$10 < T \leq 50$	36
$10 < T \leq 60$	40

(1)

(b) On the grid, draw a cumulative frequency graph for your table.



Plot right hand edges of intervals

(2)

(c) Use your graph to find an estimate for the median length of these TV adverts.

..... 37 seconds

(1)

(Total for Question is 4 marks)

Estimate Inter Quartile Range (IQR)

$$= Q_3 - Q_1 = 44 - 29 = 15 \text{ seconds}$$