

- 1 The table shows some information about the profit made each day at a cricket club on 100 days.

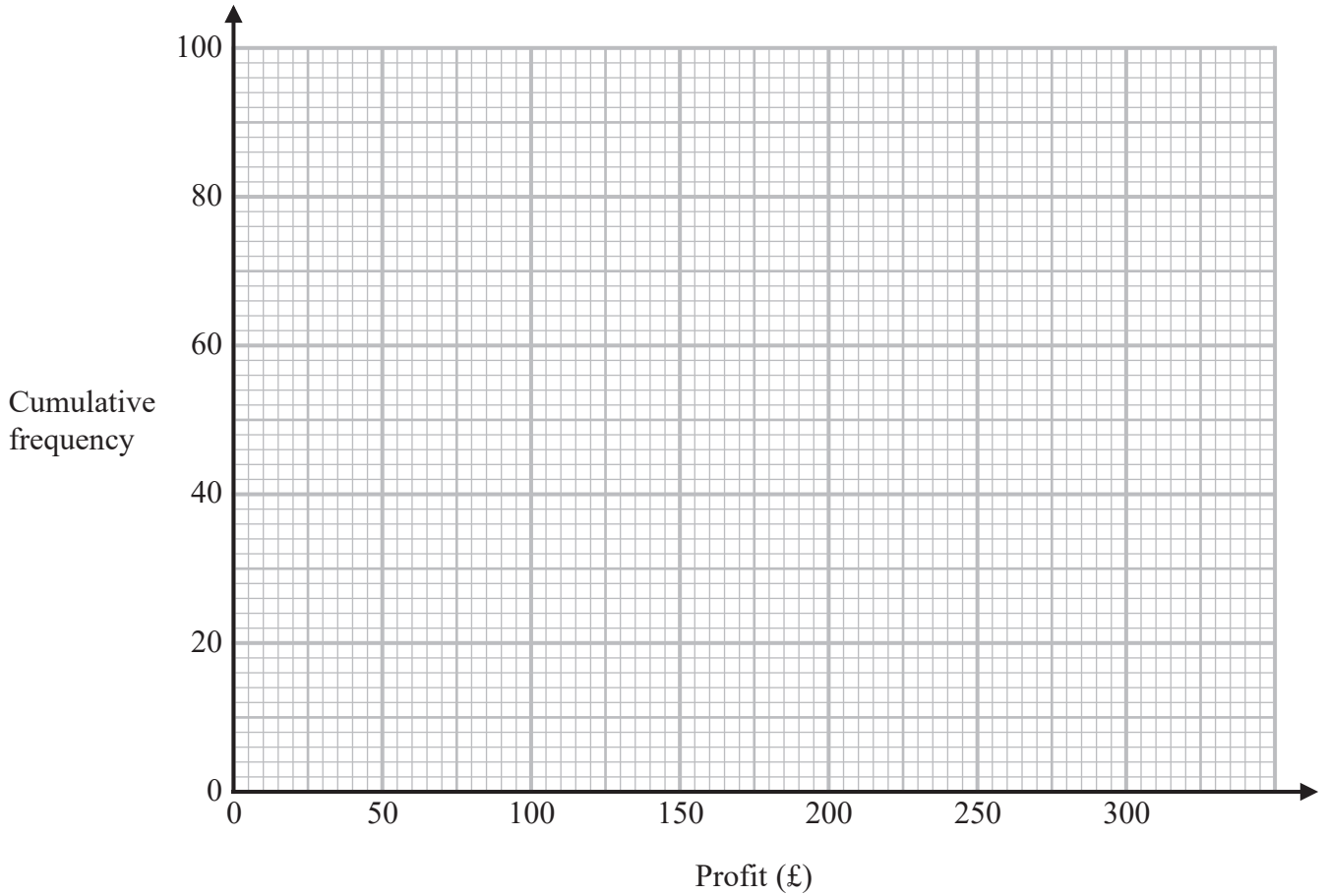
Profit (£x)	Frequency
$0 \leq x < 50$	10
$50 \leq x < 100$	15
$100 \leq x < 150$	25
$150 \leq x < 200$	30
$200 \leq x < 250$	5
$250 \leq x < 300$	15

- (a) Complete the cumulative frequency table.

Profit (£x)	Cumulative frequency
$0 \leq x < 50$	
$0 \leq x < 100$	
$0 \leq x < 150$	
$0 \leq x < 200$	
$0 \leq x < 250$	
$0 \leq x < 300$	

(1)

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



(2)

(c) Use your graph to find an estimate for the number of days on which the profit was less than £125

..... days

(1)

(d) Use your graph to find an estimate for the interquartile range.

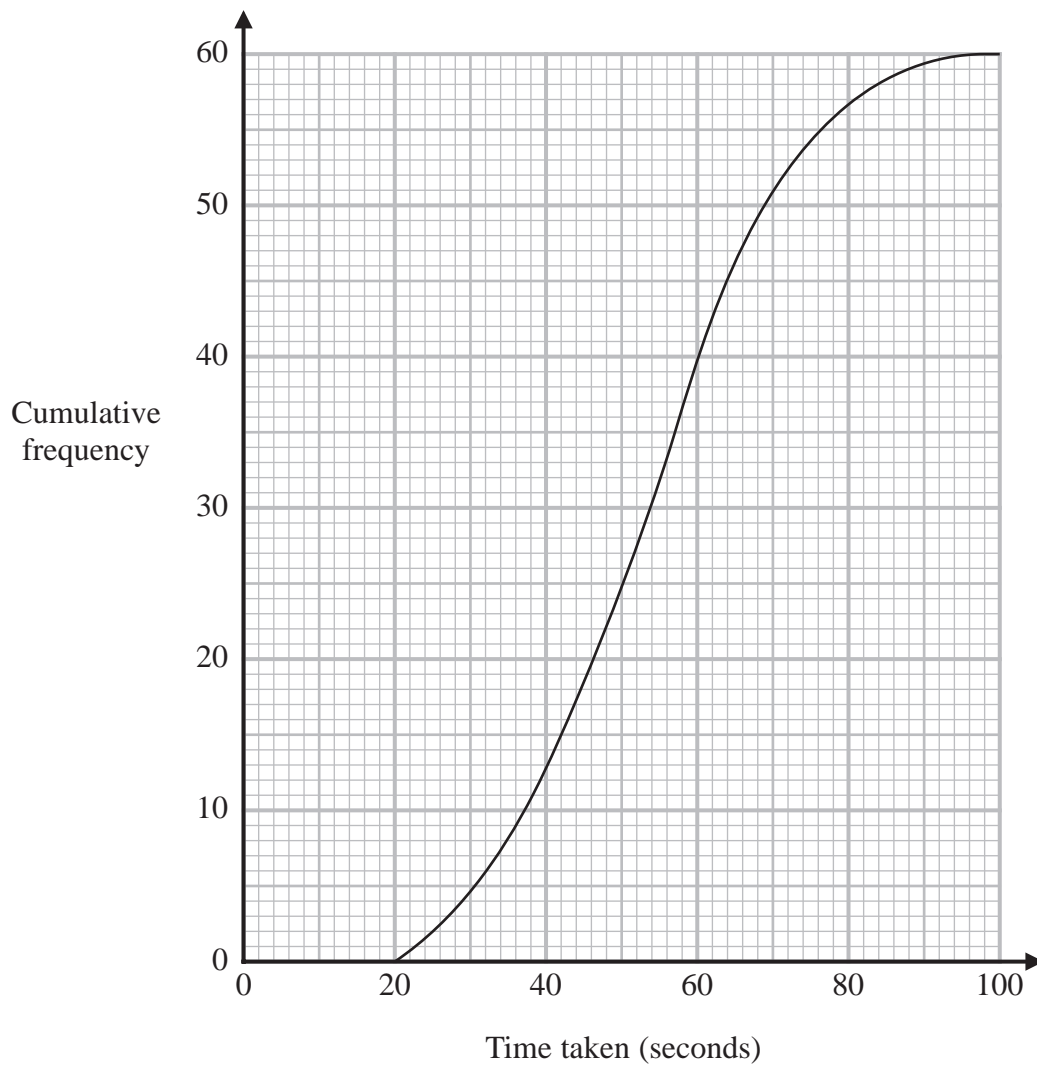
£.....

(2)

(Total for Question 1 is 6 marks)

2 In an experiment, 60 students each completed a puzzle.

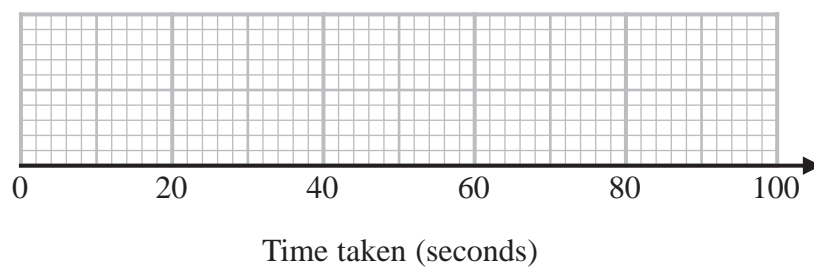
The cumulative frequency graph shows information about the times taken for the 60 students to complete the puzzle.



For these 60 students,

- the least time taken was 24 seconds
- the greatest time taken was 96 seconds.

On the grid below, draw a box plot for the distribution of the times taken by the students.

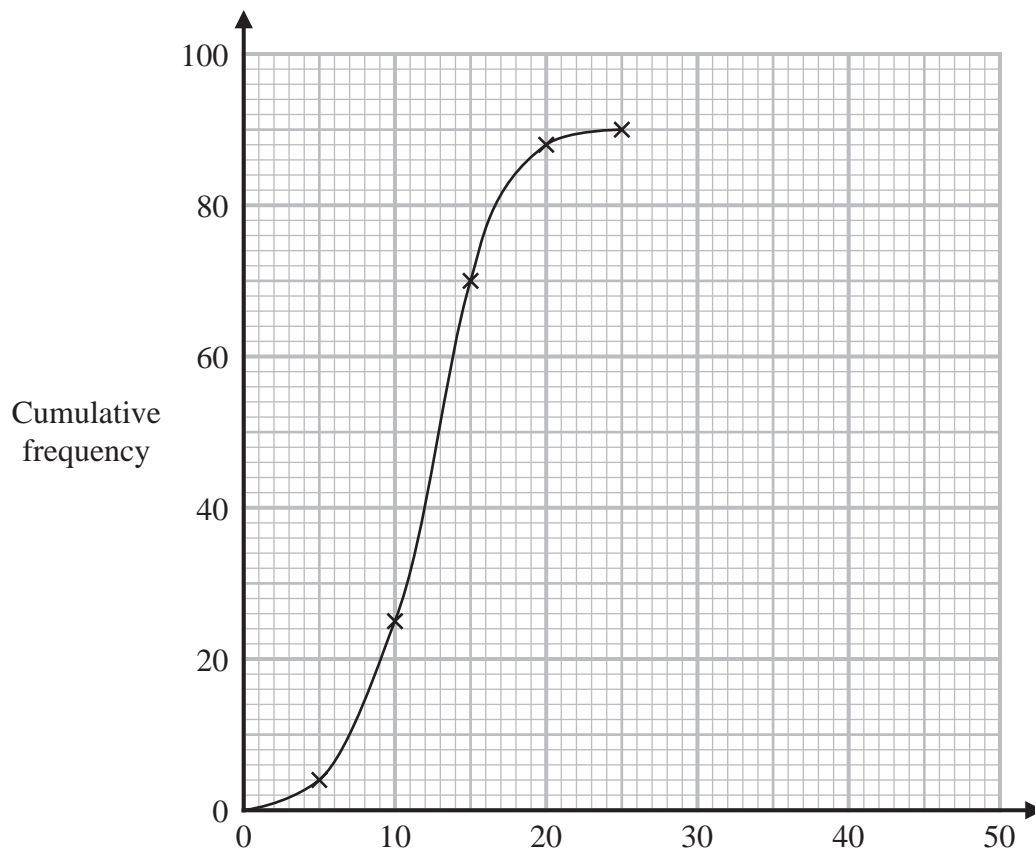


(Total for Question 2 is 3 marks)

- 3 Chen has this information about the time that it took an operator at a call centre to answer each of 90 calls.

Time (t seconds)	Cumulative frequency
$0 < t \leq 10$	4
$0 < t \leq 20$	25
$0 < t \leq 30$	70
$0 < t \leq 40$	88
$0 < t \leq 50$	90

Chen draws this cumulative frequency graph for the information in the table.



Write down two different things that are wrong with this graph.

1.....

.....

2.....

.....

(Total for Question 3 is 2 marks)

- 4 The cumulative frequency table gives information about the ages of 80 people working for a company.

Age (a years)	Cumulative frequency
$20 < a \leq 30$	20
$20 < a \leq 40$	48
$20 < a \leq 50$	64
$20 < a \leq 60$	75
$20 < a \leq 70$	80

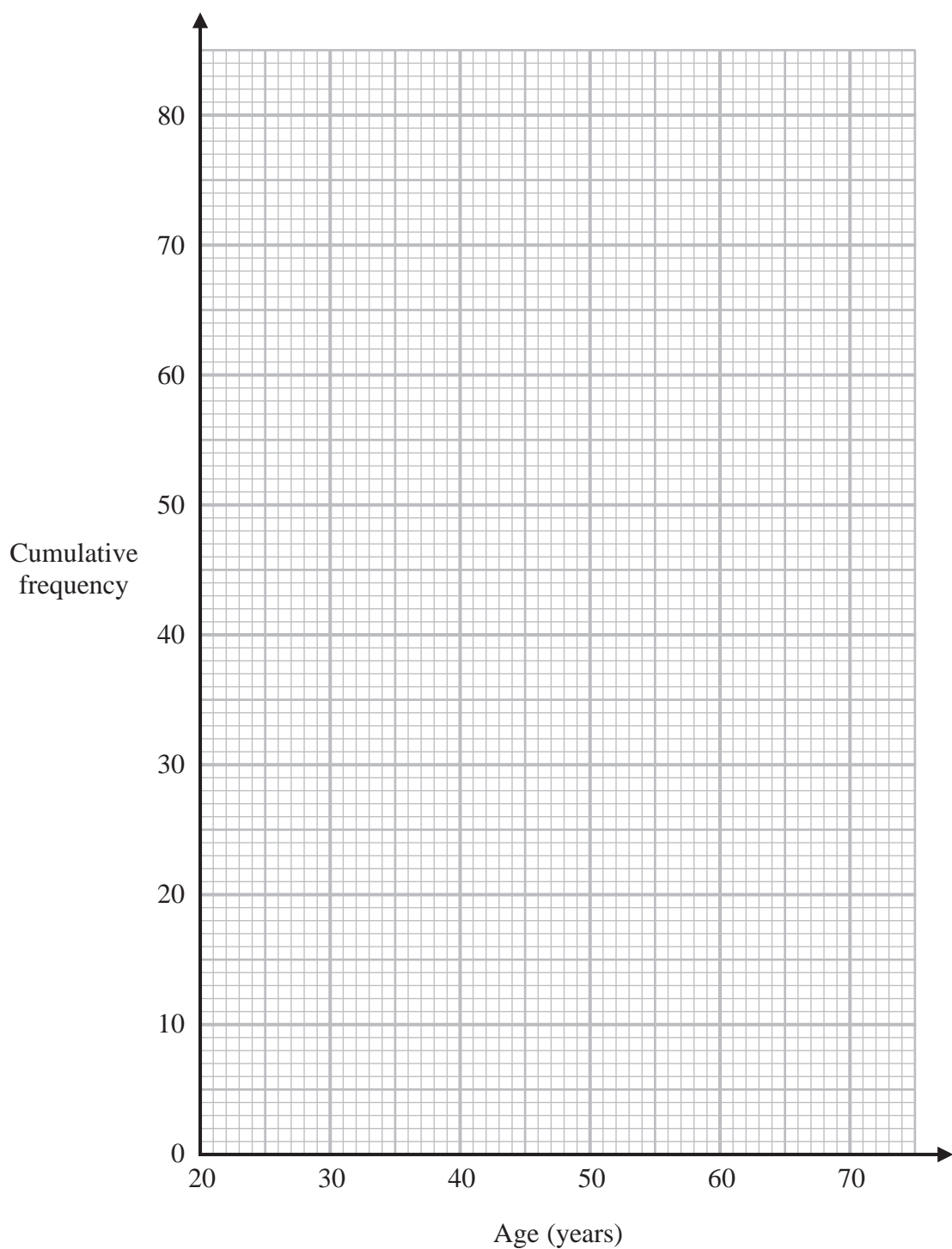
- (a) On the grid opposite, draw a cumulative frequency graph for this information.

(2)

- (b) Use your graph to find an estimate for the median age.

..... years

(1)



(Total for Question 4 is 3 marks)
