



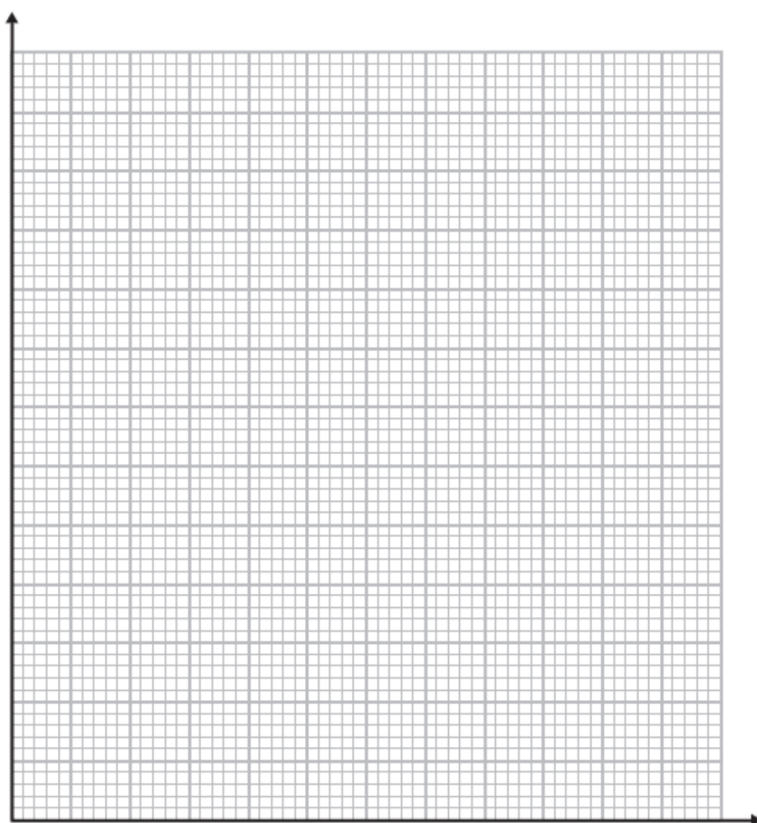
Cumulative Frequency Exam Practice

Q1. a) A farmer takes a sample of his pumpkins and weighs them.
Complete the table.

Weight g (grams)	Frequency	Cumulative Frequency
$100 \leq g < 150$	10	
$150 \leq g < 200$	15	
$200 \leq g < 250$	28	
$250 \leq g < 300$	22	
$300 \leq g < 350$	14	

Answer: _____
(2 marks)

b) Draw the cumulative frequency diagram below.



Answer: _____
(2 marks)

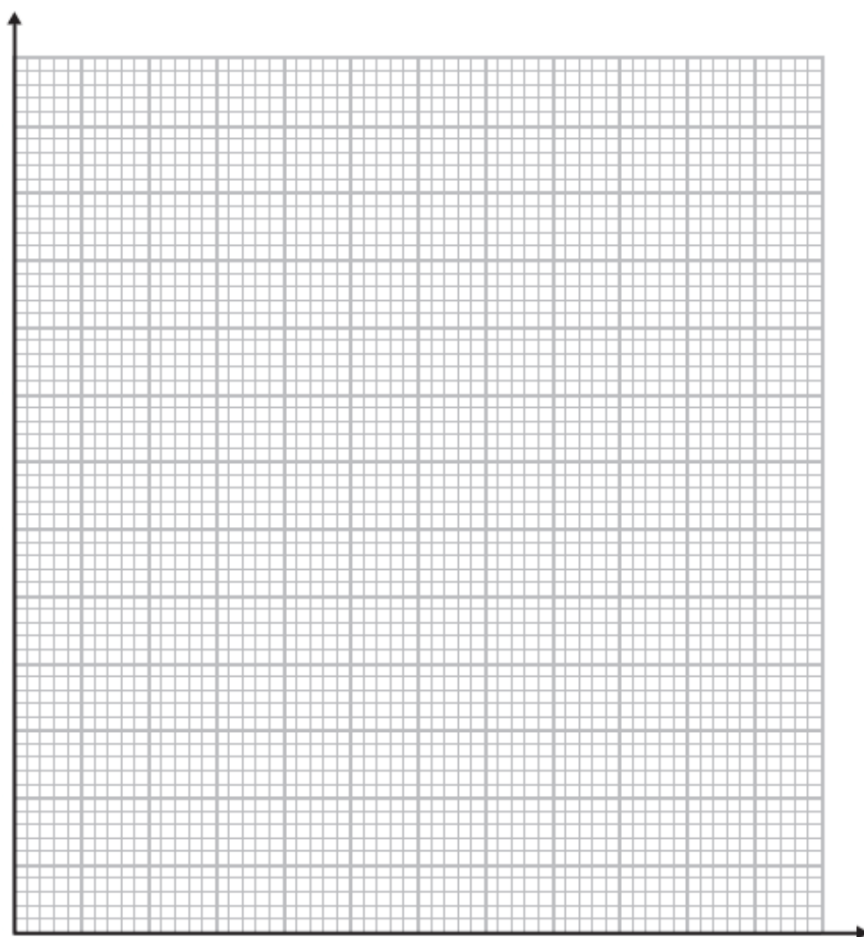


Q2. In year 10, the heights of 120 pupils are summarised below.
Complete the table.

Height h (cm)	Frequency	Cumulative Frequency
$150 \leq h < 160$	21	
$160 \leq h < 170$	25	
$170 \leq h < 180$		82
$180 \leq h < 190$		114
$190 \leq h < 200$		

Answer: _____
(2 marks)

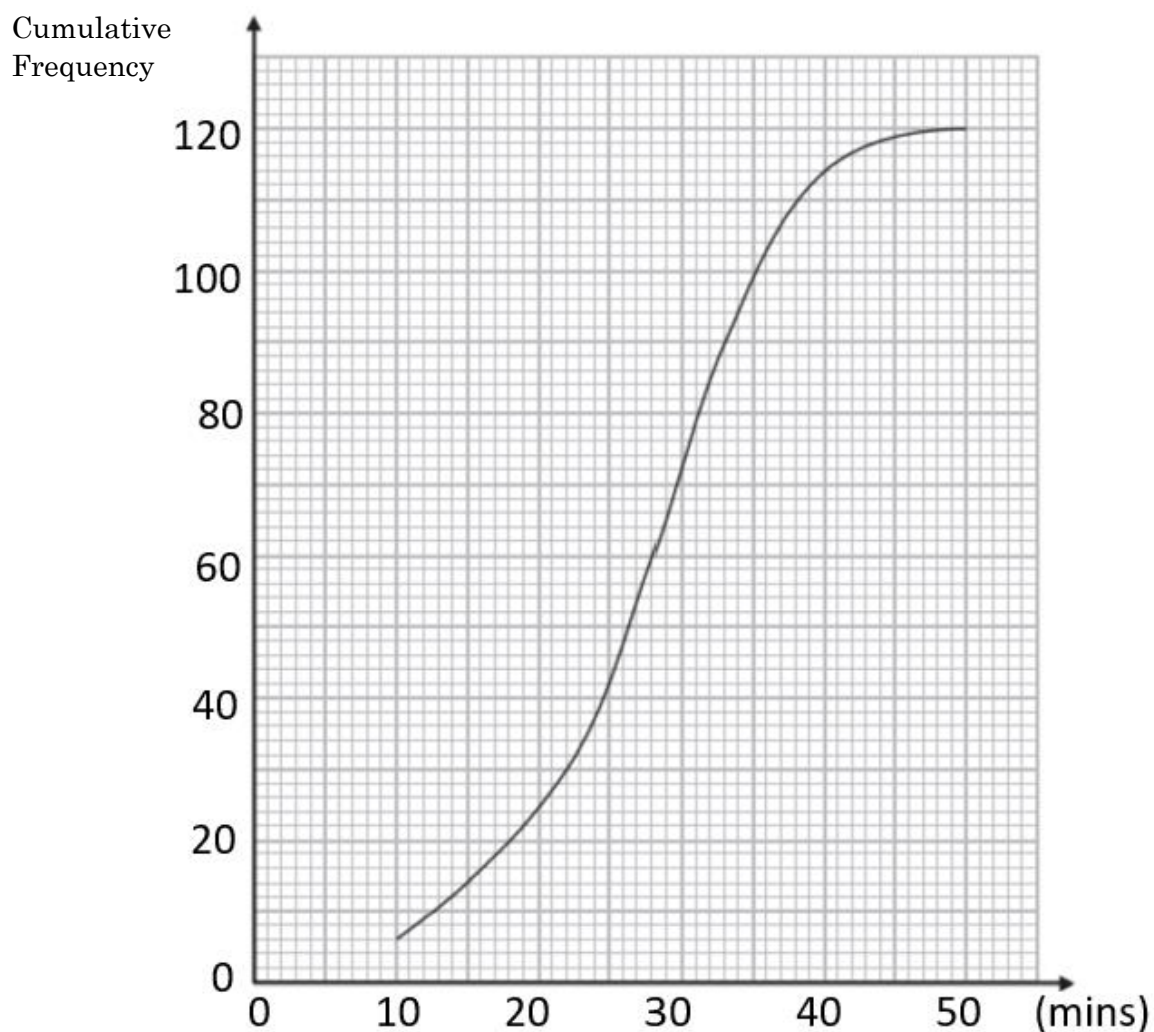
b) Draw the cumulative frequency diagram below.



Answer: _____
(2 marks)



Q3. Below is a cumulative frequency graph for the times taken to solve a puzzle.



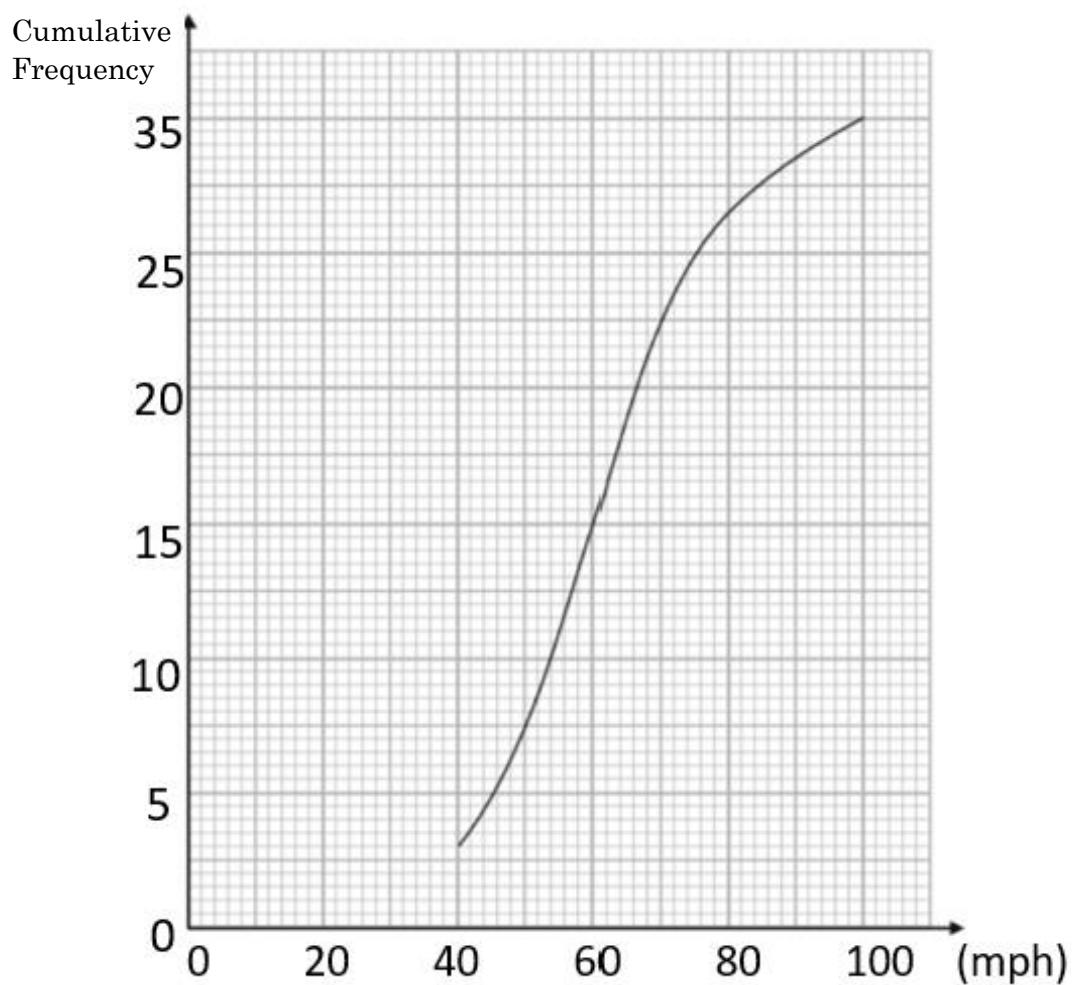
Estimate the median, upper & lower quartiles.

Answer: _____

(3 marks)



Q4. Below is a cumulative frequency graph for the speeds of cars passing under a bridge.



a) Estimate the numbers of cars travelling:

(i) more than 52 mph (ii) less than 90 mph

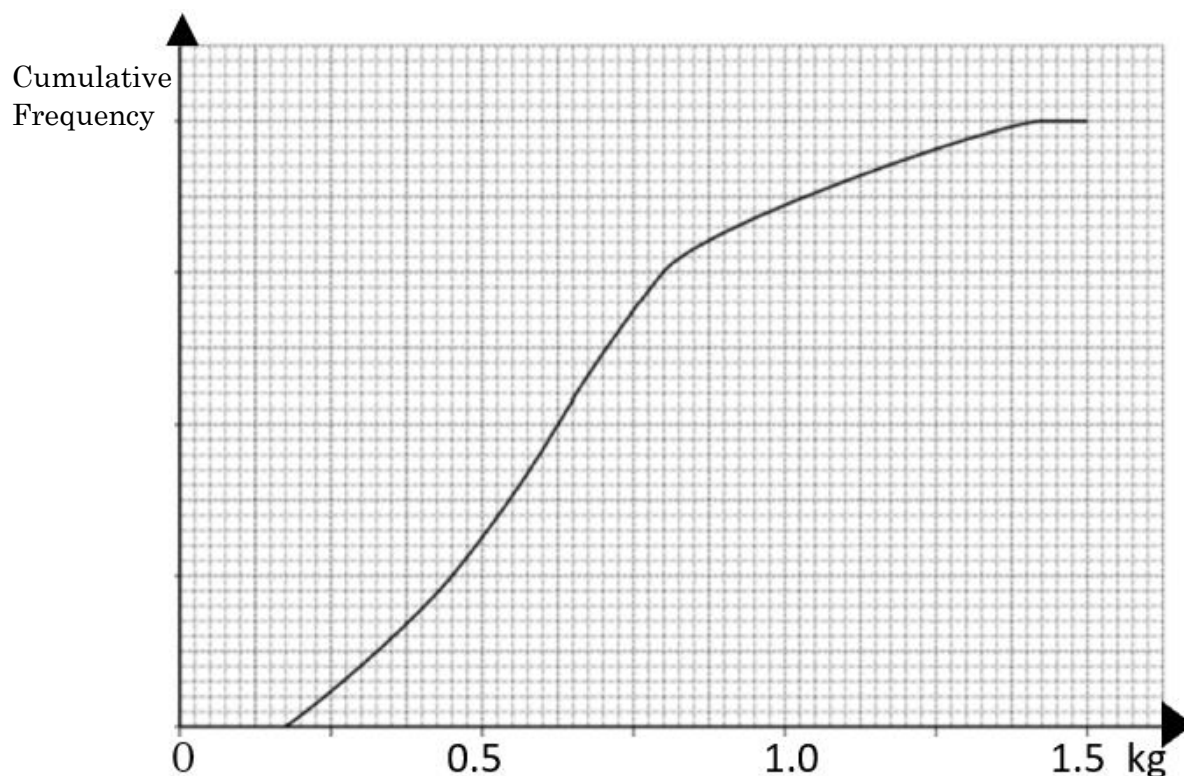
Answer: _____
(2 marks)

b) What % of cars are moving between 40 and 70mph?

Answer: _____
(2 marks)



Q5. Tim grows and sells mangoes. The graph below shows the distribution of the 40 mangoes in his field.



a) Find the weight of a mango which corresponds to the upper quartile.

Answer: _____
(1 mark)

b) Estimate the % of mangoes which weigh between 750g and 1100g

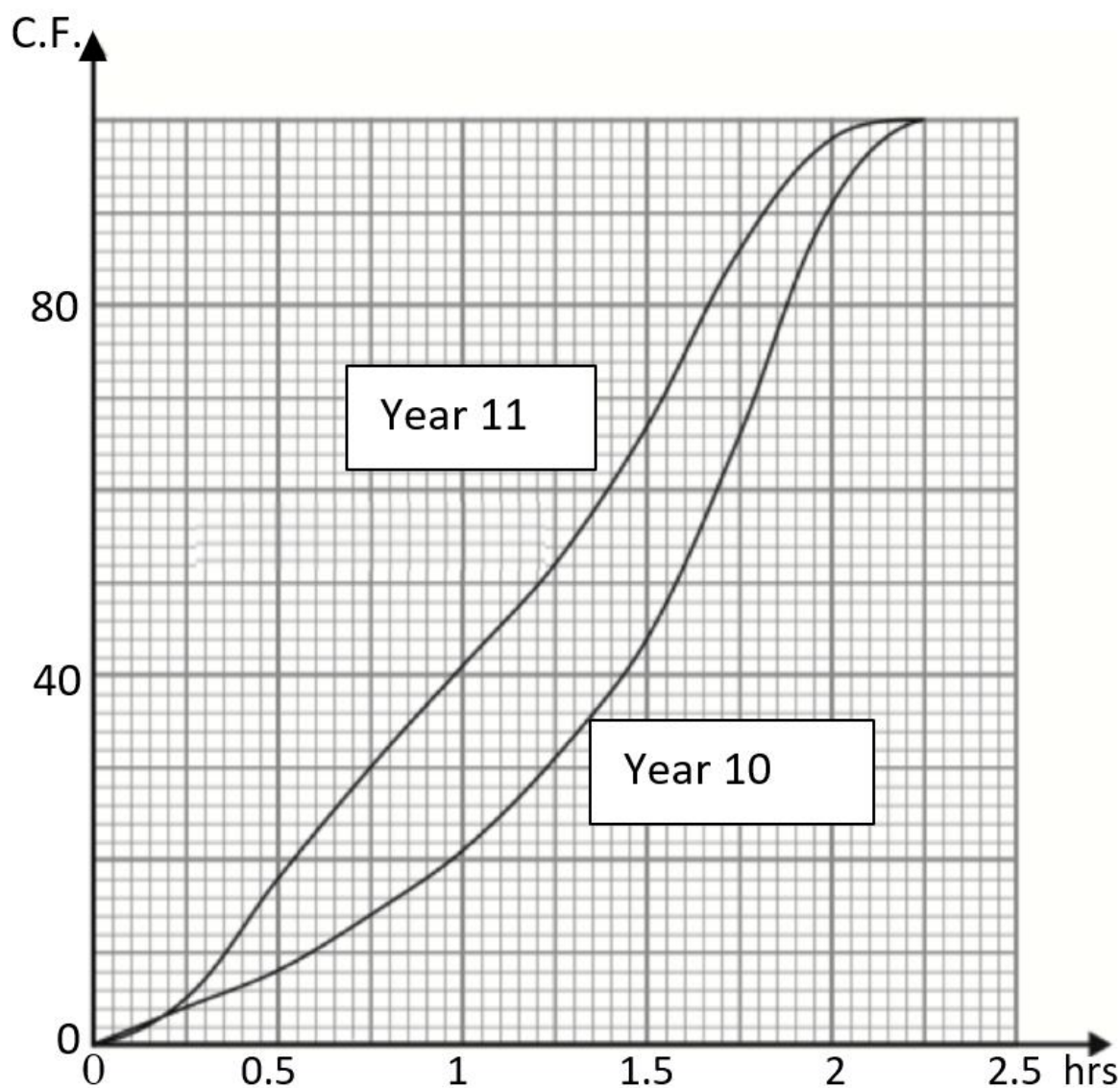
Answer: _____
(2 marks)

c) Tim only sells mangoes weighing more than 0.6kg. Estimate how many he will sell.

Answer: _____
(1 mark)



Q6. This cumulative frequency graph show the amount of time spent on homework per night.



a) How many pupils were surveyed in total?

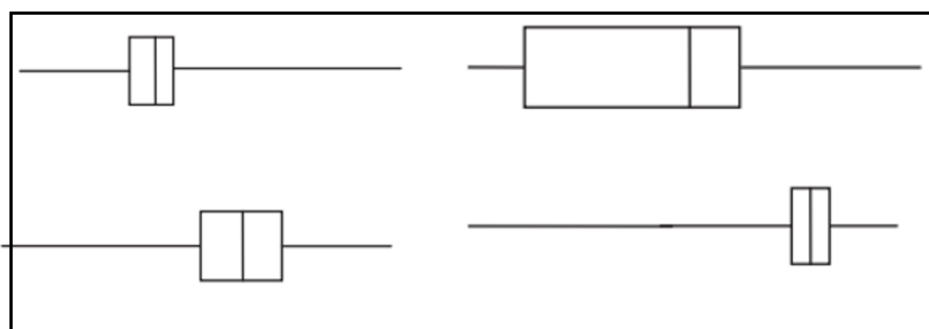
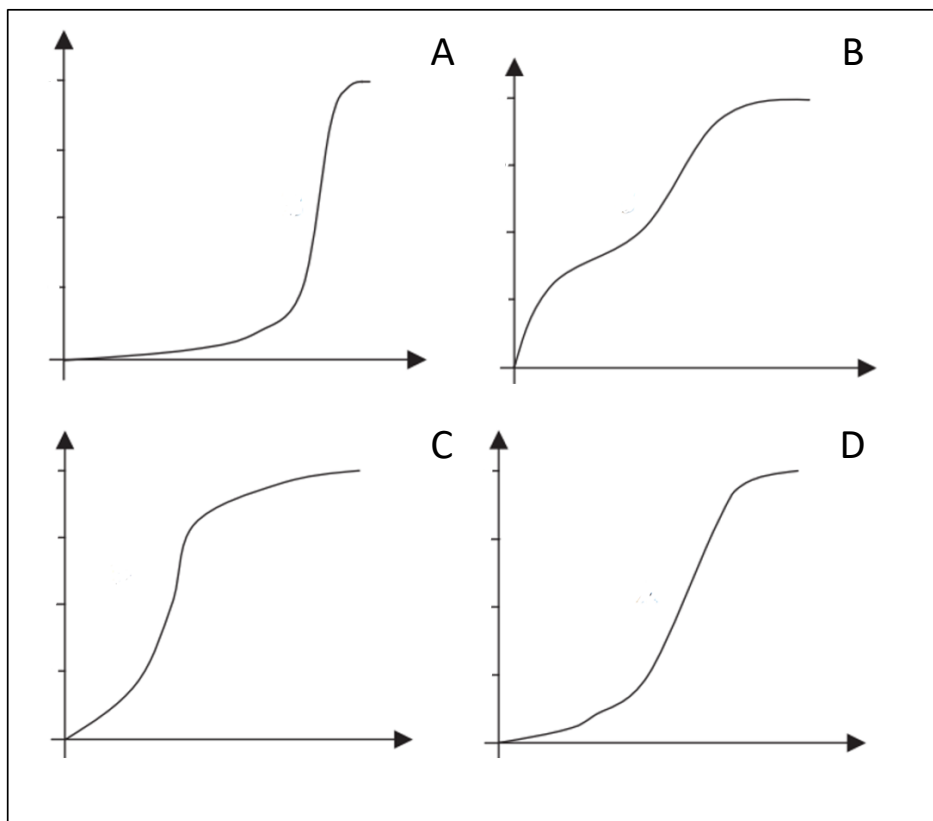
Answer: _____
(1 mark)

b) Make 2 comparisons between the distribution of the amount of homework time spent by year 10 and year 11 pupils.

Answer: _____
(3 marks)



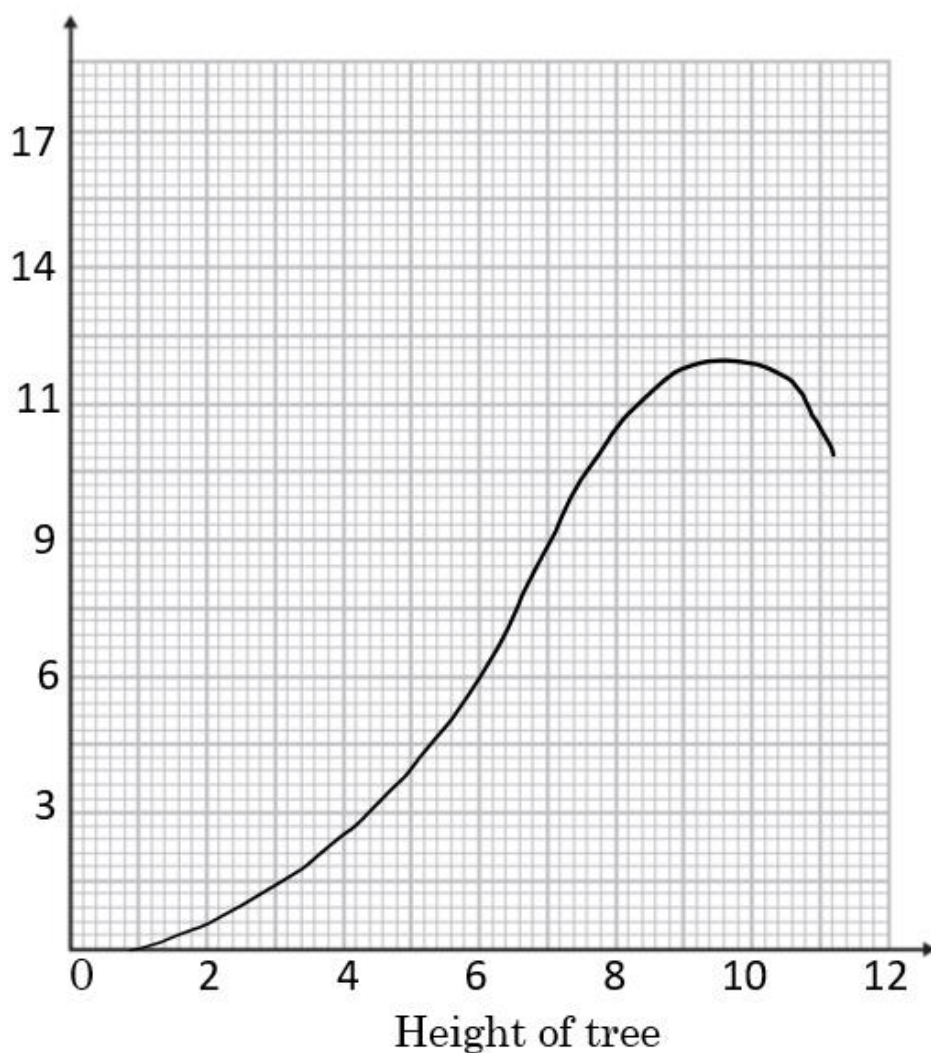
Q7. Match each cumulative graph to the box plot by writing the appropriate letter next to each box plot.



Answer: _____
(3 marks)



Q8. Roger has drawn the cumulative frequency graph to display the heights of trees in the local woodland. Identify three mistakes he has made.



Answer: _____
(3 marks)