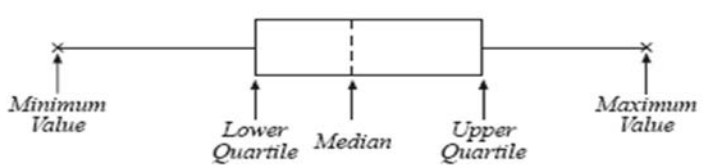




Starter:

Calculate the median and range of the following: 6, 13, 5, 19, 16, 28

Top Tips! Learn to define all the words box and whisker diagram!



Remember: Interquartile range = Upper quartile – lower quartile

Examination Question:

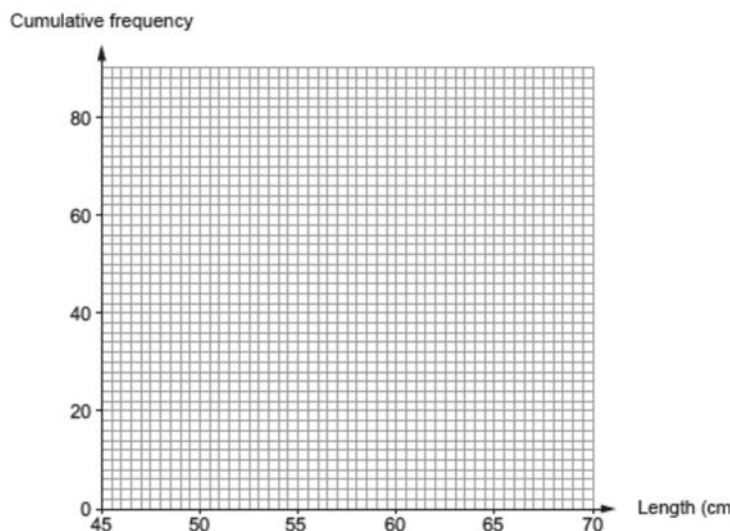
2014 Summer Link - Applications U1 Higher Qu 10, 2014 January Link - Methods U1 Higher Qu 12

The table gives the grouped frequency distribution for the lengths of the electrical cords of 80 toasters.
 (a) Complete the following cumulative frequency table.

Length to the nearest (cm)	49-53	54-58	59-63	64-68
Number of toasters	6	38	32	4

Length (cm)	<48.5	<53.5	<58.5	<63.5	<68.5
Cumulative Frequency	0	6			

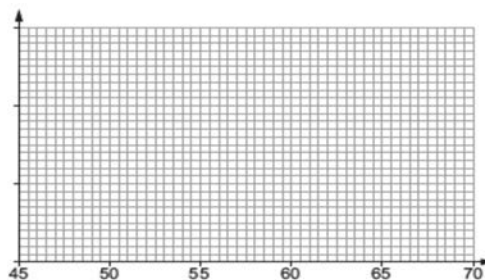
(b) On the graph paper below, draw a cumulative frequency diagram to show this information [2]



(c) Use your cumulative frequency diagram to find an estimate for the median, the lower quartile, the upper quartile and the interquartile range of the lengths of the electrical cords in centimetres.

Median	
Lower Quartile	
Upper Quartile	
Interquartile range	

(d) The length of the shortest electrical cord is 50 cm.
 The length of the longest electrical cord is 68cm.
 Draw a box and whisker diagram to illustrate the lengths of the electrical cords.





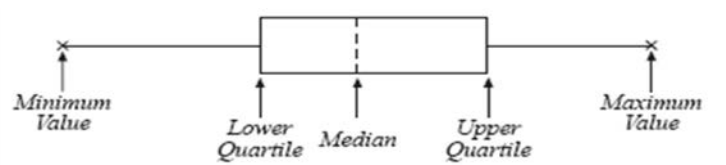
Starter:

Calculate the median and range of the following: 6, 13, 5, 19, 16, 28

Median = 14.5

Range = 23

Top Tips! Learn to define all the words box and whisker diagram!



Remember: Interquartile range = Upper quartile – lower quartile

Examination Question:

2014 Summer Link - Applications U1 Higher Qu 10, 2014 January Link - Methods U1 Higher Qu 12

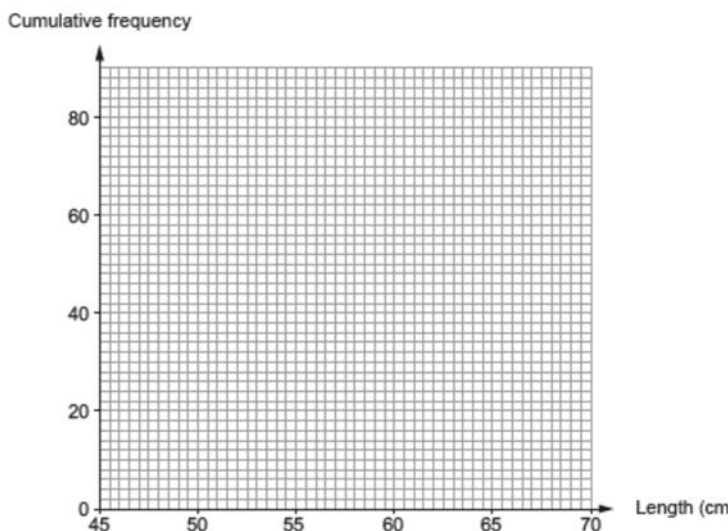
The table gives the grouped frequency distribution for the lengths of the electrical cords of 80 toasters.

(b) Complete the following cumulative frequency table.

Length to the nearest (cm)	49-53	54-58	59-63	64-68
Number of toasters	6	38	32	4

Length (cm)	<48.5	<53.5	<58.5	<63.5	<68.5
Cumulative Frequency	0	6	44	76	80

(b) On the graph paper below, draw a cumulative frequency diagram to show this information [2]



(c) Use your cumulative frequency diagram to find an estimate for the median, the lower quartile, the upper quartile and the interquartile range of the lengths of the electrical cords in centimetres.

Median	≈ 58
Lower Quartile	≈ 55.5
Upper Quartile	≈ 61
Interquartile range	≈ 5.5

(d) The length of the shortest electrical cord is 50 cm.

The length of the longest electrical cord is 68cm. Draw a box and whisker diagram to illustrate the lengths of the electrical cords.

