

6. The table gives a grouped frequency distribution of the arm lengths of 100 women each measured correct to the nearest centimetre.

Arm length, $a$ cm	156 to 158	159 to 161	162 to 164	165 to 167	168 to 170
Number of women	5	15	35	40	5

(a) Complete the following cumulative frequency table.

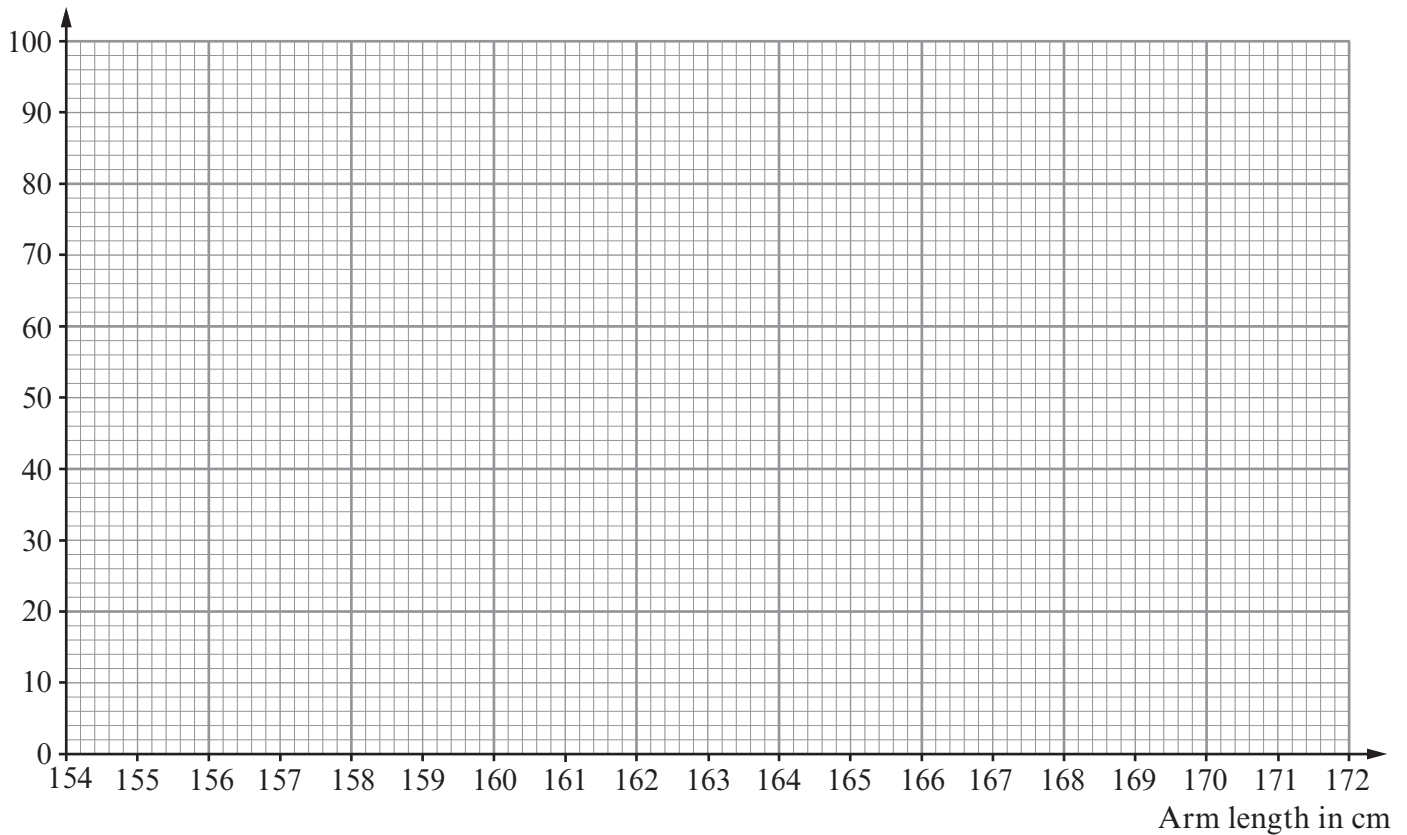
Arm length, $a$ cm	$a < 155.5$	$a < 158.5$	$a < 161.5$	$a < 164.5$	$a < 167.5$	$a < 170.5$
Cumulative frequency	0	5				

[1]

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

[2]

Cumulative frequency



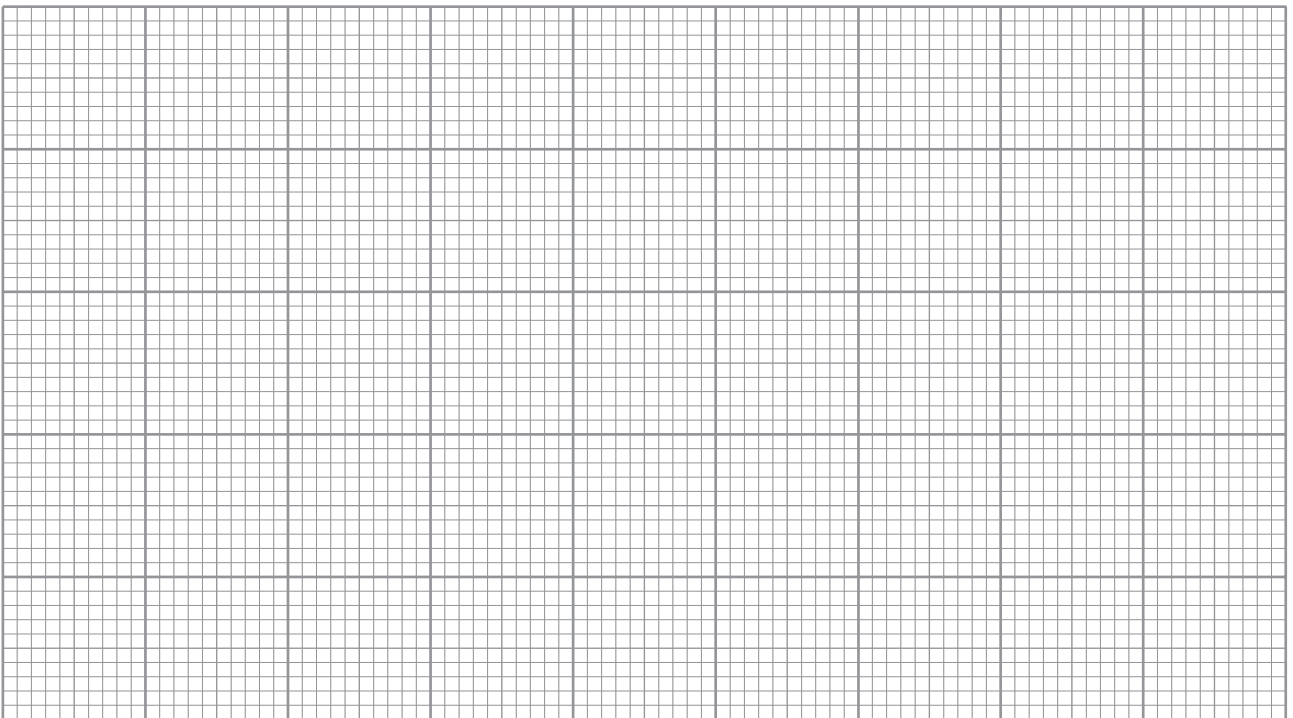
(c) Use your cumulative frequency diagram to estimate the median and the interquartile range.

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Median ..... Interquartile range .....

[3]

(d) Use the graph paper below to draw a box-and-whisker diagram to show these results.



[4]