

1. The lengths, in millimetres, of 300 engine bolts were measured. The table shows a grouped frequency distribution of the results.

Length (x mm)	$48 < x \leq 49$	$49 < x \leq 50$	$50 < x \leq 51$	$51 < x \leq 52$	$52 < x \leq 53$
Frequency	12	102	86	76	24



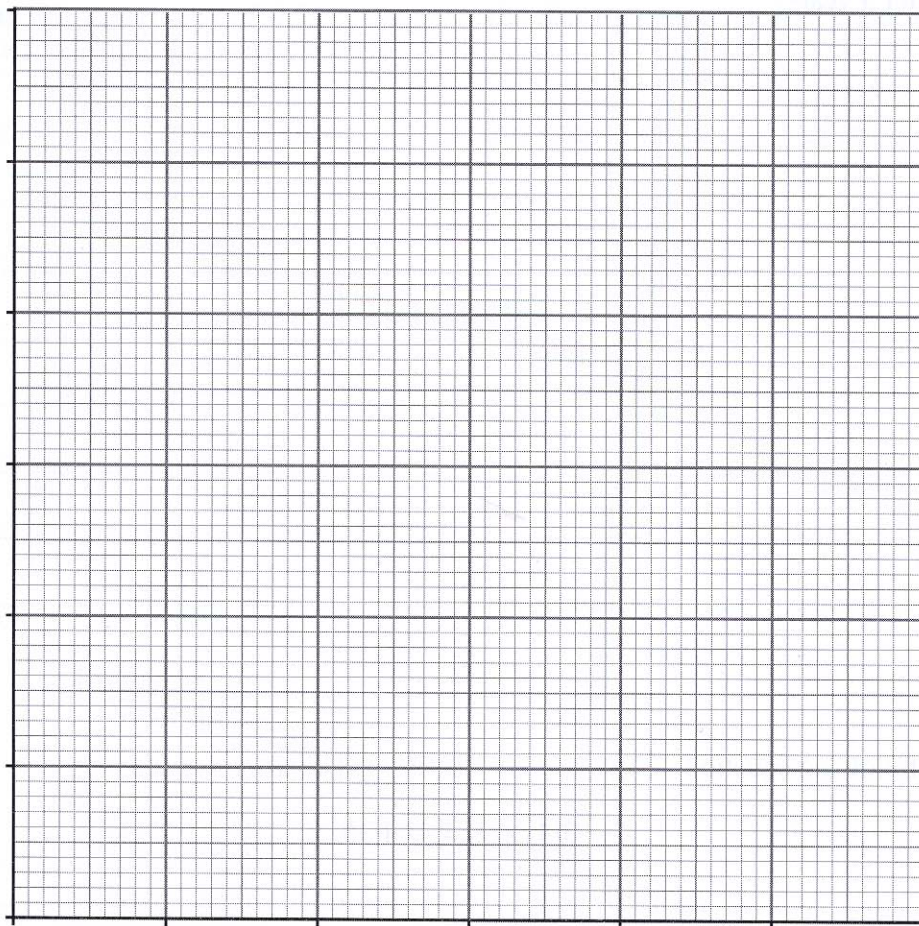
Write down the class interval in which the median of the data will be found.

1. The marks obtained in an examination by 100 pupils were recorded. The table shows a grouped frequency distribution of the results.

Mark (x)	$0 < x \leq 20$	$20 < x \leq 40$	$40 < x \leq 60$	$60 < x \leq 80$	$80 < x \leq 100$
Frequency	12	25	44	10	9

On the graph paper below, draw a frequency polygon to show the data.

[3]



3. The masses of 90 pupils were measured to the nearest kilogram. The table shows a grouped frequency distribution of the results.

Mass, m (to the nearest kg)	Number of pupils
$30 \leq m < 40$	3
$40 \leq m < 50$	24
$50 \leq m < 60$	30
$60 \leq m < 70$	22
$70 \leq m < 80$	11

Find an estimate for the mean mass of the pupils.

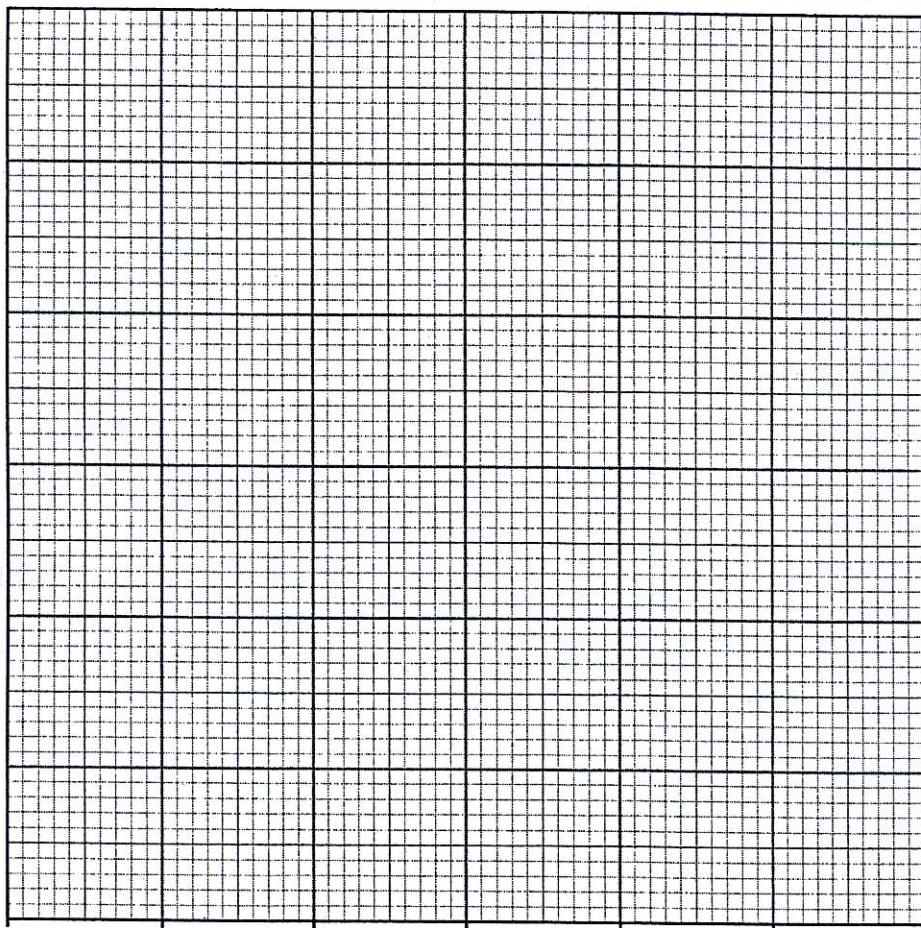


1. The heights of 70 pupils were measured to the nearest cm. The table below shows a grouped frequency distribution of the results.

Height, h (to the nearest cm)	$130 < h \leq 140$	$140 < h \leq 150$	$150 < h \leq 160$	$160 < h \leq 170$	$170 < h \leq 180$
Frequency	8	15	24	13	10

On the graph paper below, draw a frequency polygon to show this data.

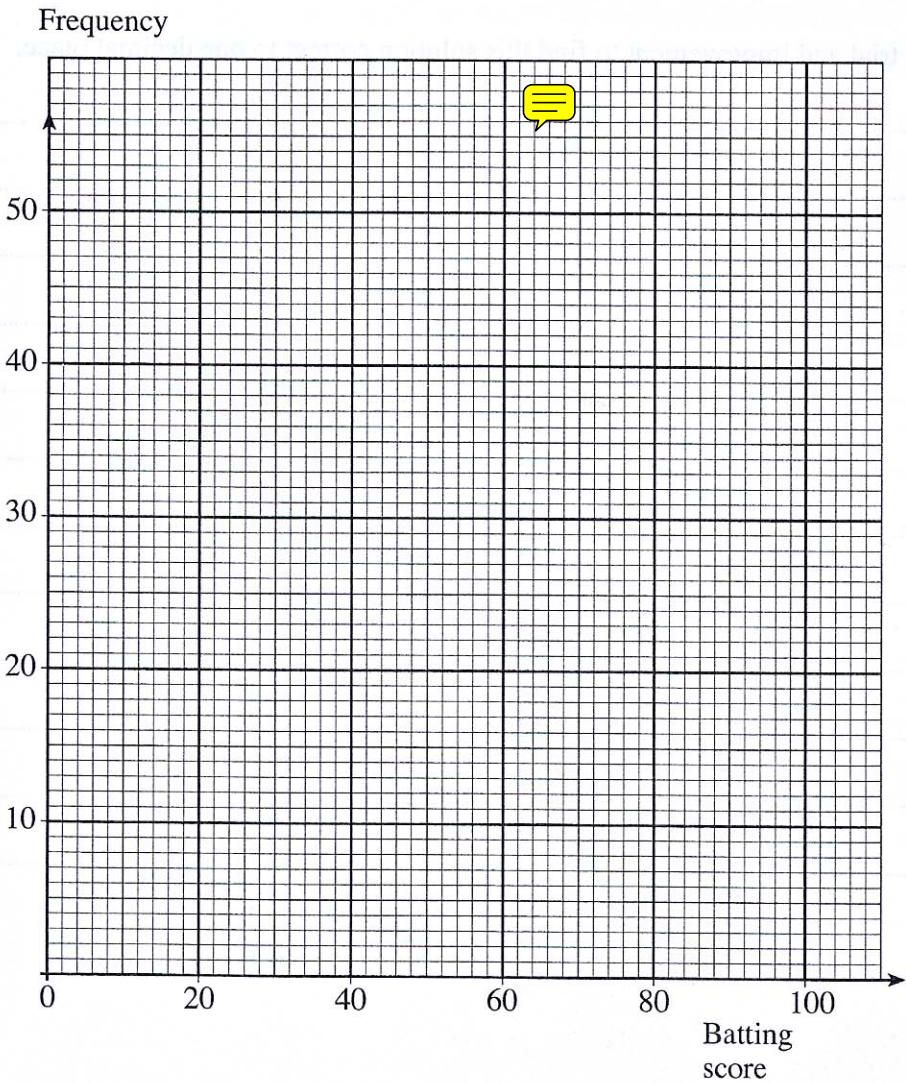
[3]



4. (a) The batting scores of 100 cricketers were recorded and the results are summarised in the following table.

Batting score	Frequency
0 - 19	20
20 - 39	45
40 - 59	24
60 - 79	9
80 - 99	2

On the graph paper, below draw a frequency polygon for the data.



(b) Find an estimate for the mean of the batting scores.

2. The speeds of 120 cars on a stretch of motorway were measured and the following results were obtained.

Speed, s (m.p.h.)	Number of cars
$30 \leq s < 40$	6
$40 \leq s < 50$	24
$50 \leq s < 60$	30
$60 \leq s < 70$	45
$70 \leq s < 80$	12
$80 \leq s < 90$	3

Find an estimate for the mean speed of the cars.

