

P4- Histograms and Frequency Polygons (Continuous)

OCR

Edexcel

22 The table gives information about the times that 100 people took to travel to work.

Video created by W Neill

Time (t minutes)	Frequency
$0 < t \leq 10$	10
$10 < t \leq 20$	26
$20 < t \leq 30$	23
$30 < t \leq 40$	19
$40 < t \leq 50$	14
$50 < t \leq 60$	8

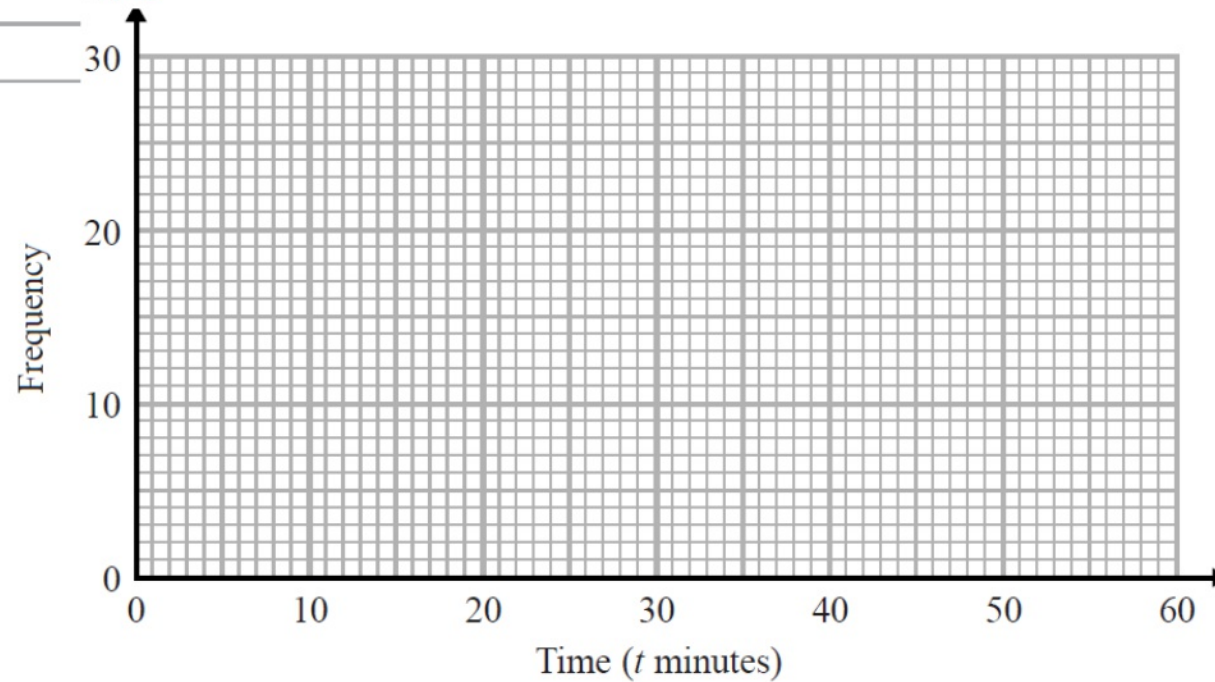
(a) Find the class interval that contains the median.

P19

(1)

(b) Draw a frequency polygon for the information in the table. (2)

P4



22 The table gives information about the times that 100 people took to travel to work.

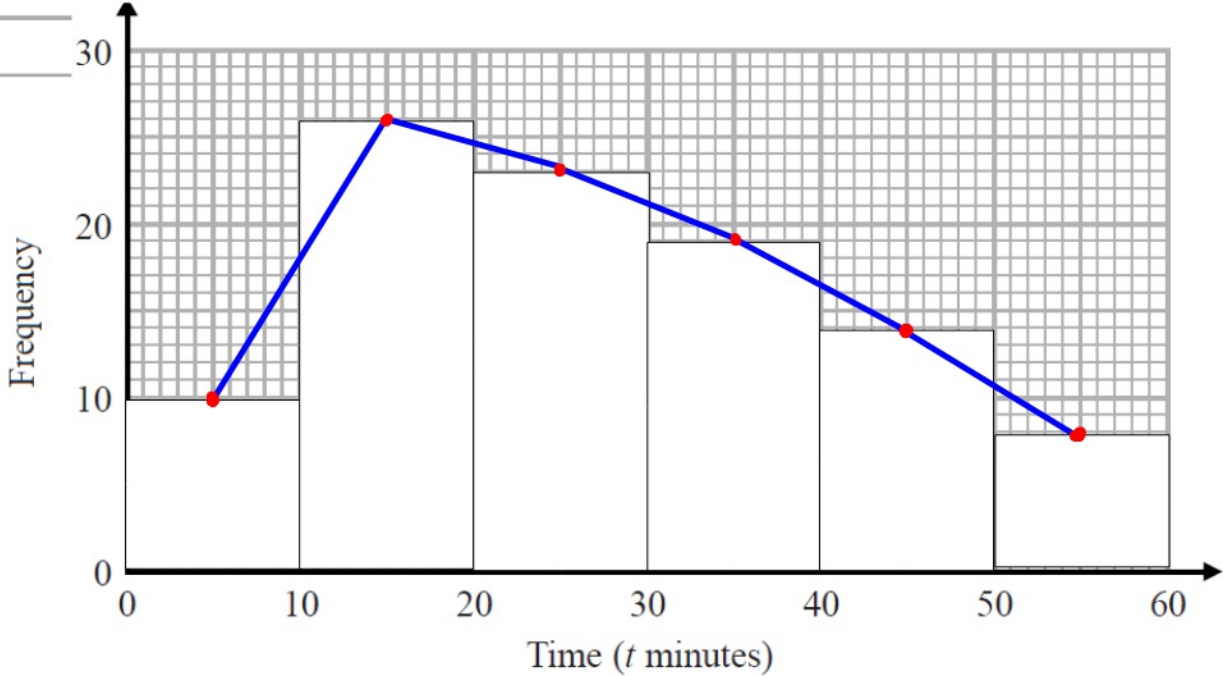
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$50 < t \leq 60$	8

(a) Find the class interval that contains the median.

$20 < t \leq 30$
(1)

(b) Draw a frequency polygon for the information in the table. (2)

P4



100 people
50th person

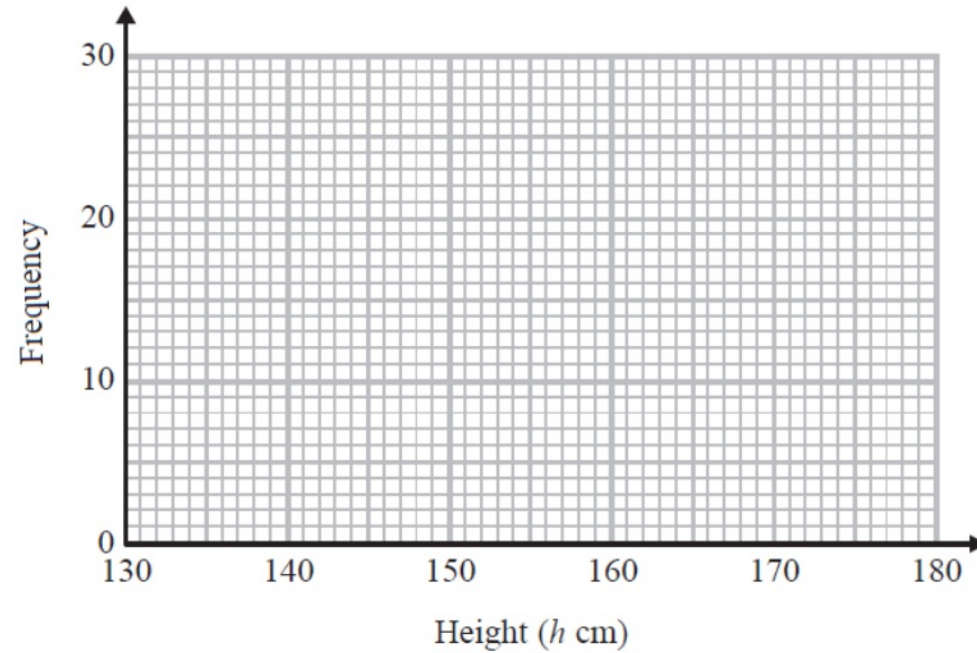
$$\frac{100+1}{2} = 50.5^{\text{th}} \text{ person}$$

19 The table shows information about the heights of 80 children.

Created by W Neill

Height (h cm)	Frequency
$130 < h \leq 140$	4
$140 < h \leq 150$	11
$150 < h \leq 160$	24
$160 < h \leq 170$	22
$170 < h \leq 180$	19

(a) Find the class interval that contains the median.

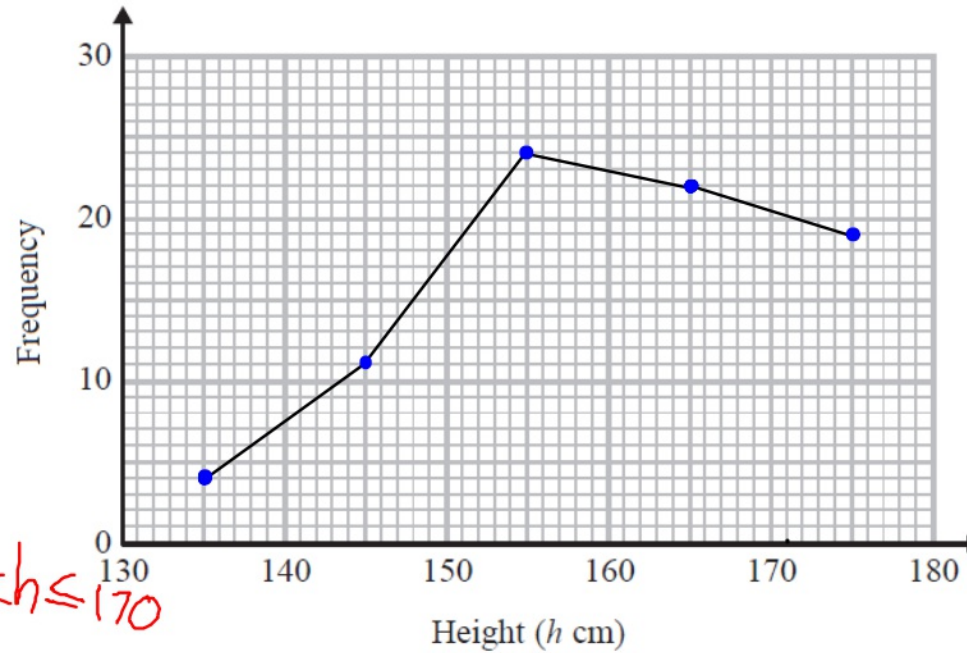


(b) Draw a frequency polygon for the information in the table.

19 The table shows information about the heights of 80 children.

Created by W Neill

Height (h cm)	Frequency
$130 < h \leq 140$	4
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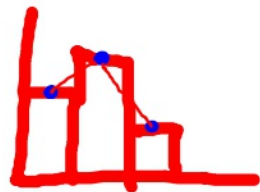


(a) Find the class interval that contains the median.

80 children middle person 40^{th}

..... $\frac{80+1}{2} = \frac{81}{2} = 40.5^{\text{th}}$ $160 < h \leq 170$

(b) Draw a frequency polygon for the information in the table.

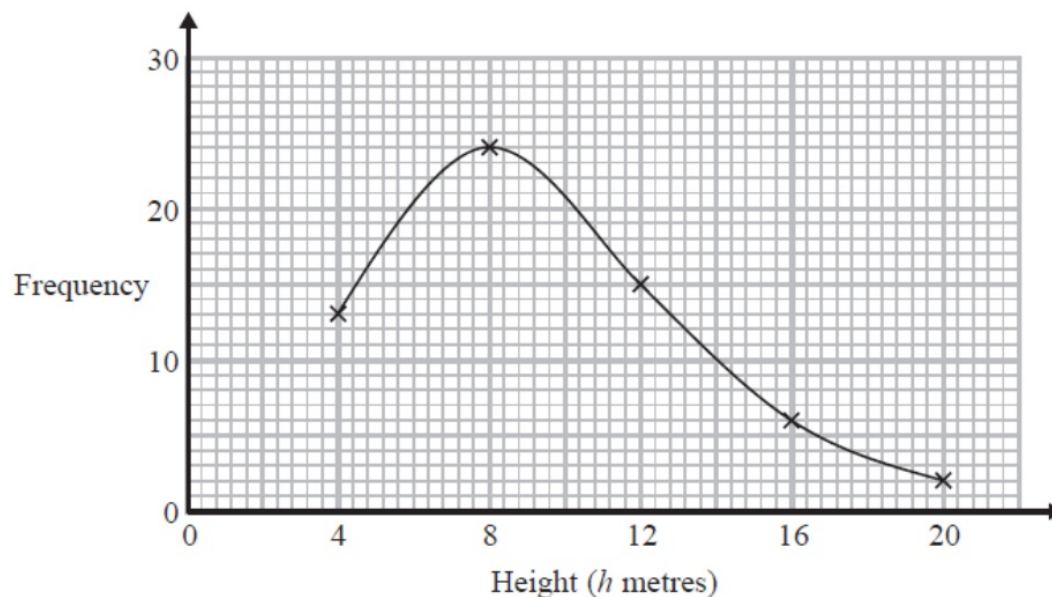


4 The table shows information about the heights of 60 trees.

Video created by W Neill

Height (h metres)	Frequency
$0 < h \leq 4$	13
$4 < h \leq 8$	24
$8 < h \leq 12$	15
$12 < h \leq 16$	6
$16 < h \leq 20$	2

Jacob drew this frequency polygon for the information in the table.
The frequency polygon is **not** correct.



Write down **two** things that are wrong with the frequency polygon.

1

2

(Total for Question 4 is 2 marks)

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Video created by W Neill

Height (h metres)	Frequency
$0 < h \leq 4$	13
$4 < h \leq 8$	24
$8 < h \leq 12$	15
$12 < h \leq 16$	6
$16 < h \leq 20$	2

Jacob drew this frequency polygon for the information in the table. The frequency polygon is **not** correct.



Write down **two** things that are wrong with the frequency polygon.

- 1 Crosses need to be in the middle of the data.
- 2 Needs to be joined up with a straight line.

(Total for Question 21 is 2 marks)

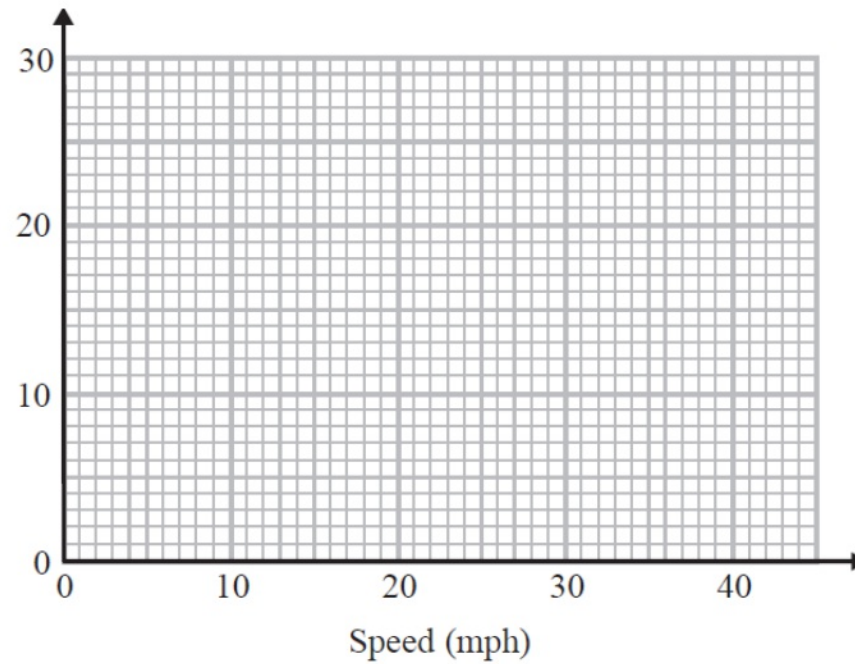
7 The table gives information about the speeds of 70 cars.

Video Created by W Neill

P4

Speed (s mph)	Frequency
$0 < s \leq 10$	14
$10 < s \leq 20$	18
$20 < s \leq 30$	26
$30 < s \leq 40$	12

Frequency



Draw a frequency polygon for this information.

(Total for Question 7 is 2 marks)

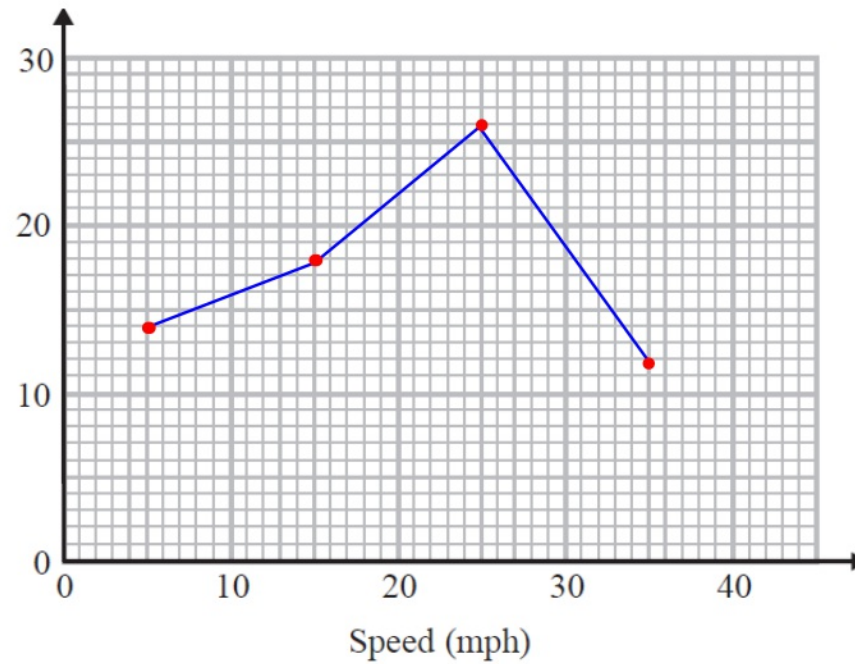
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P4

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$0 < s \leq 10$	14
$10 < s \leq 20$	18
$20 < s \leq 30$	26
$30 < s \leq 40$	12

Frequency



Draw a frequency polygon for this information.

(Total for Question 7 is 2 marks)



AQA