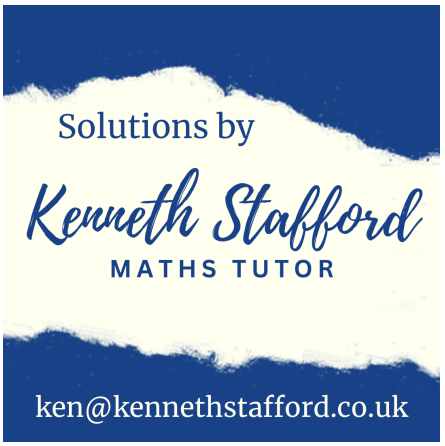
Name: SOLUTIONS

GCSE (1 - 9)

Frequency Polygons





These questions are compiled from *released* Pearson Edexcel GCSE maths exam papers
They contain exam questions from up until the ***Summer 2023*** exam series
More recent exam papers do exist but are withheld for mock exams
As new exam papers are released these worksheets will gradually be updated
The ***most current*** version of these worksheets will always be available at: kennethstafford.co.uk

Question	Where the question appeared
1	Edexcel, GCSE, Autumn 2017, Paper 3F, Q19
2	Edexcel, GCSE, Autumn 2019, Paper 2F, Q21
3	Edexcel, GCSE, Summer 2019, Paper 3F, Q26
4	Edexcel, GCSE, Summer 2023, Paper 1F, Q23
5	Edexcel, GCSE, Summer 2022, Paper 3F, Q26

Frequency Polygons (Questions from Edexcel GCSE Past Papers)

1

The table shows information about the heights of 80 children.

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

4
15
39
61
80

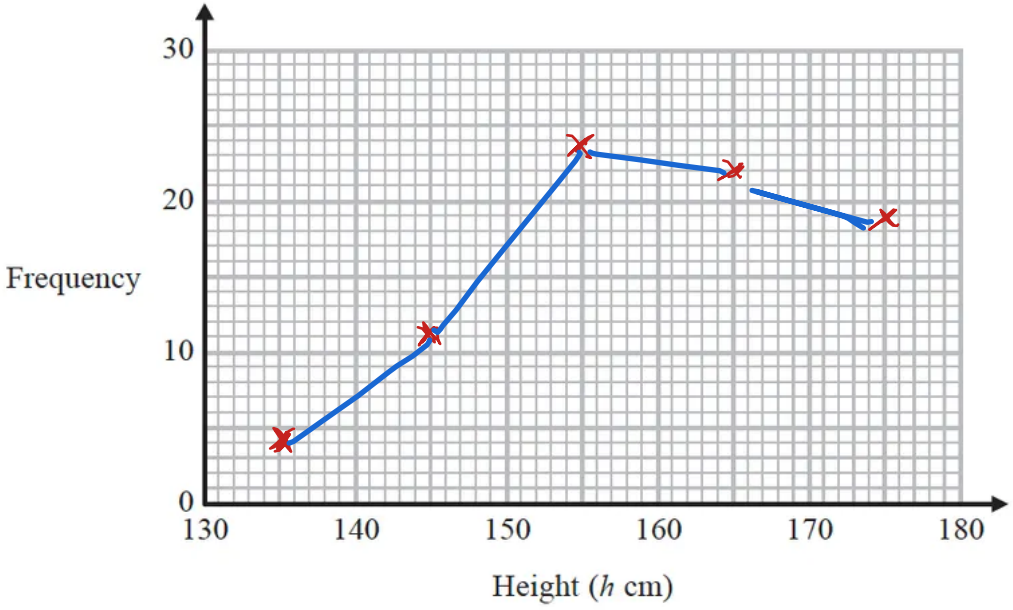
(a) Find the class interval that contains the median.

40th child

$160 < h \leq 170$

(1)

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



(2)

(Total for Question 19 is 3 marks)

[Edexcel, GCSE, Autumn 2017, Paper 3F, Q19]

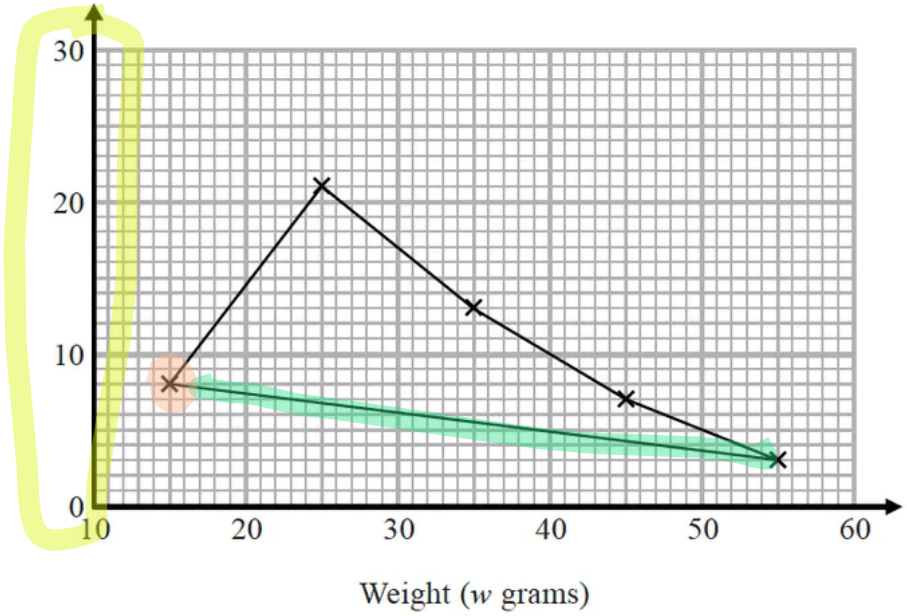
Frequency Polygons (Questions from Edexcel GCSE Past Papers)

2

The table shows some information about the weights of 50 potatoes.

Weight (w grams)	Frequency
$10 < w \leqslant 20$	6
$20 < w \leqslant 30$	21
$30 < w \leqslant 40$	13
$40 < w \leqslant 50$	7
$50 < w \leqslant 60$	3

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



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

The polygon should not be closed.

There is no frequency label on the y axis

(15,6) has been plotted incorrectly. (The first point is at 8 rather than 6).

(Total for Question 21 is 2 marks)

[Edexcel, GCSE, Autumn 2019, Paper 2F, Q21]

Frequency Polygons (Questions from Edexcel GCSE Past Papers)

3

The table shows information about the heights of 80 plants.

Height (h cm)	Frequency
$10 < h \leqslant 20$	7
$20 < h \leqslant 30$	13
$30 < h \leqslant 40$	14
$40 < h \leqslant 50$	12
$50 < h \leqslant 60$	16
$60 < h \leqslant 70$	18

Cumulative frequency

7
20
34
46
62
80

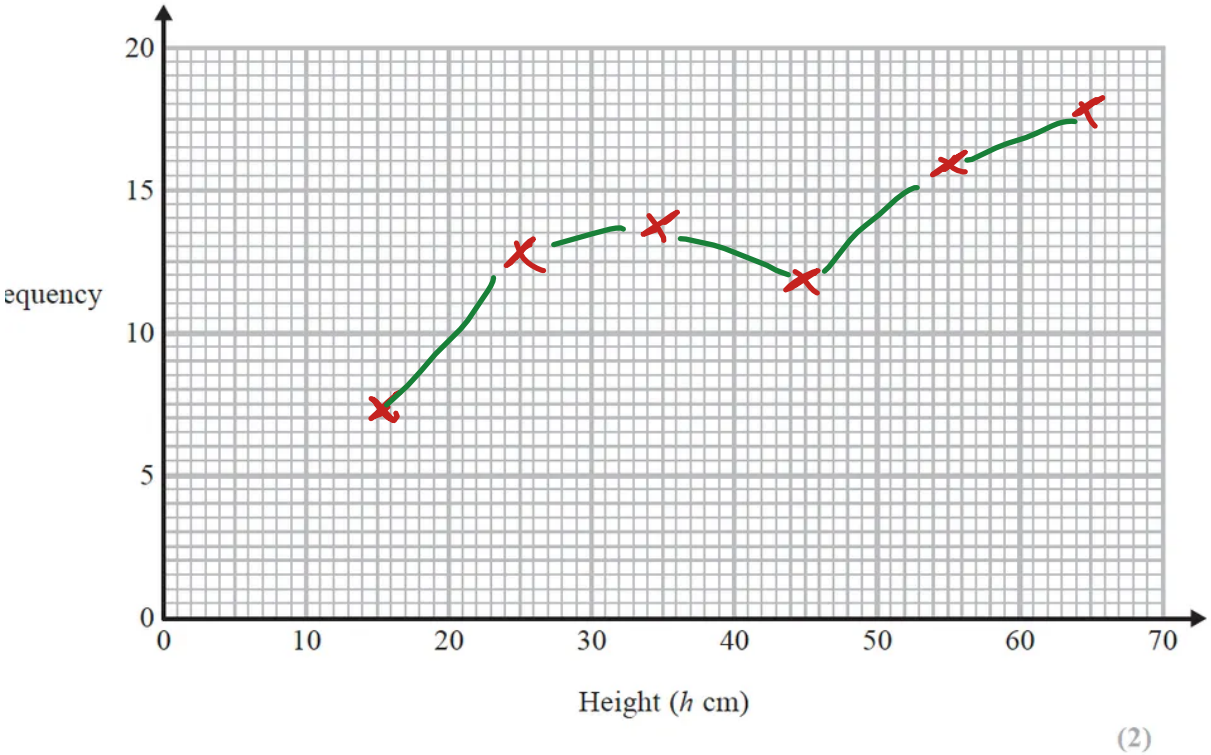
(a) Find the class interval that contains the median.

40th plant is the median

$40 < h \leq 50$

(1)

(b) On the grid, draw a frequency polygon for the information in the table.



(2)

(Total for Question 26 is 3 marks)

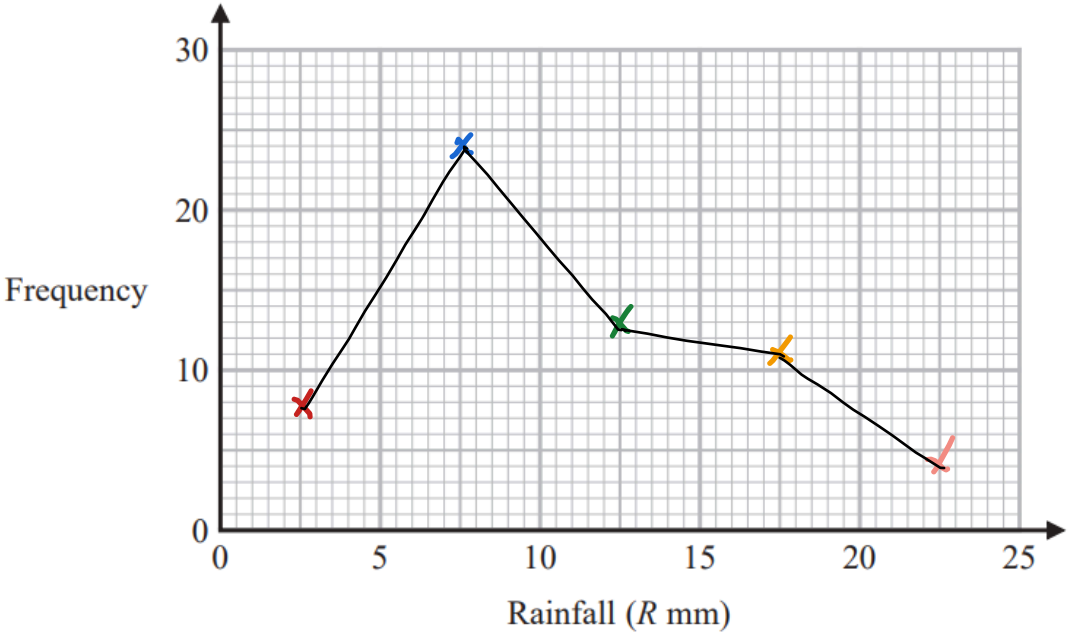
[Edexcel, GCSE, Summer 2019, Paper 3F, Q26]

4

The table shows information about the daily rainfall in a town for 60 days.

Rainfall (R mm)	Frequency
$0 \leqslant R < 5$	8
$5 \leqslant R < 10$	24
$10 \leqslant R < 15$	13
$15 \leqslant R < 20$	11
$20 \leqslant R < 25$	4

Draw a frequency polygon for this information.



(Total for Question 23 is 2 marks)

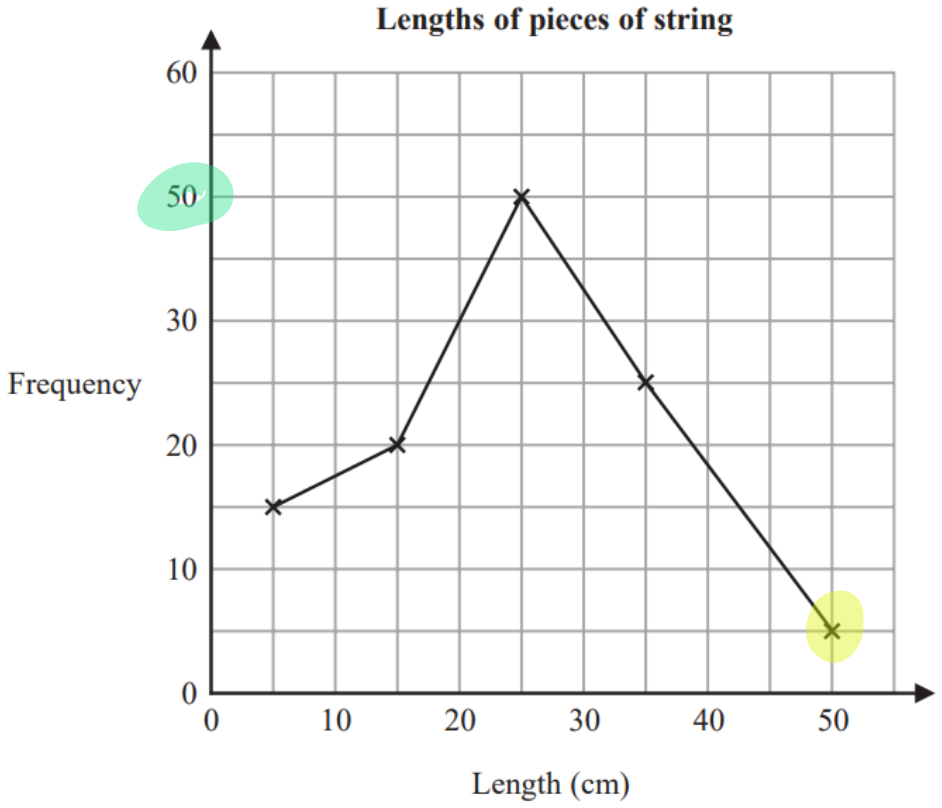
[Edexcel, GCSE, Summer 2023, Paper 1F, Q23]

5

The table gives information about the lengths, in cm, of some pieces of string.

Length (t cm)	Frequency
$0 < t \leqslant 10$	15
$10 < t \leqslant 20$	20
$20 < t \leqslant 30$	50
$30 < t \leqslant 40$	25
$40 < t \leqslant 50$	5

Amos draws a frequency polygon for the information in the table.



Write down **two** mistakes that Amos has made.

1 The frequency axis doesn't have 40 on it.

2 The final coordinate should be (45 , 5) but is drawn at (50 , 5)

(Total for Question 26 is 2 marks)

[Edexcel, GCSE, Summer 2022, Paper 3F, Q26]