

Name: _____

GCSE (1 – 9)

Frequency Polygons

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

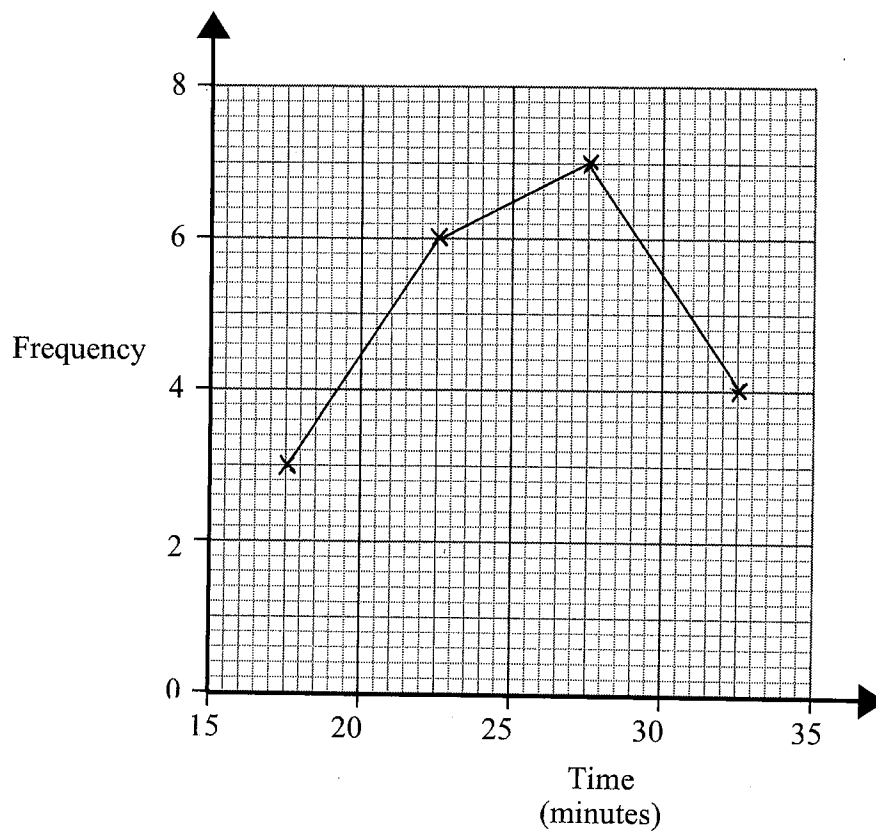
Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

1 The table below gives information about the time taken for 20 people to run 5 km.

Time (minutes)	Frequency
$15 < t \leq 20$	3
$20 < t \leq 25$	6
$25 < t \leq 30$	7
$30 < t \leq 35$	4

Draw a frequency polygon to show this information.

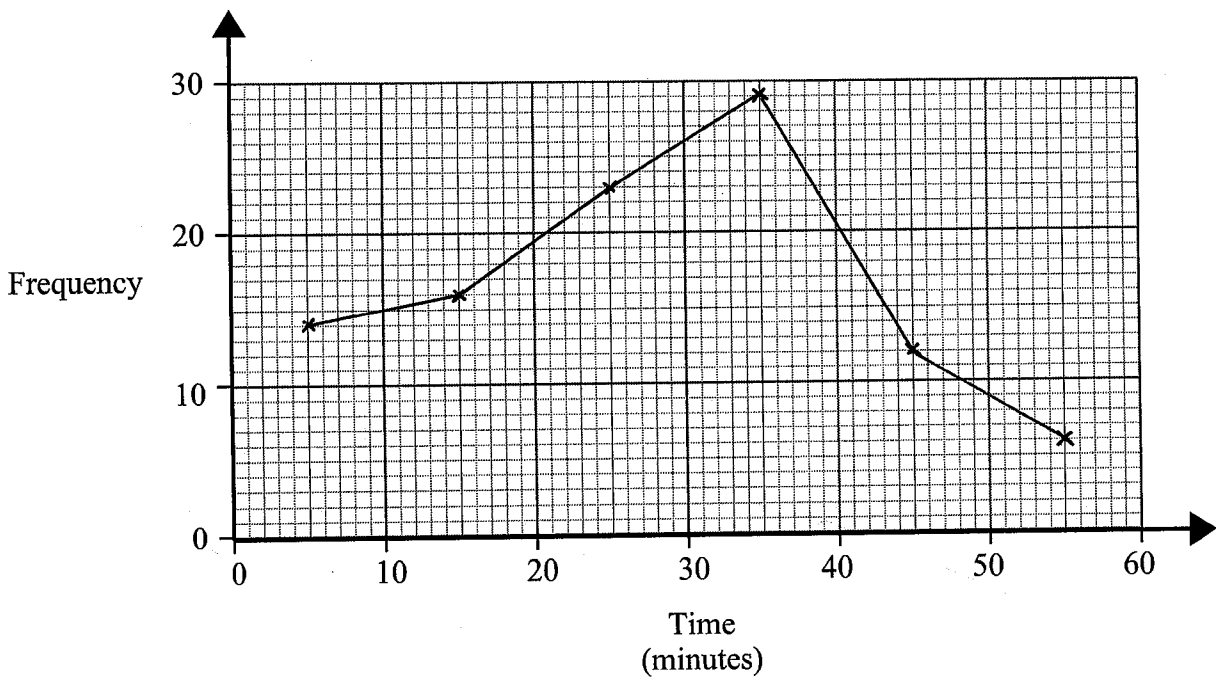


(Total for Question 1 is 2 marks)

2 The frequency table shows the time taken for 100 people to travel to an event.

Time (minutes)	Frequency
$0 < t \leq 10$	14
$10 < t \leq 20$	16
$20 < t \leq 30$	23
$30 < t \leq 40$	29
$40 < t \leq 50$	12
$50 < t \leq 60$	6

Draw a frequency polygon to show this information.

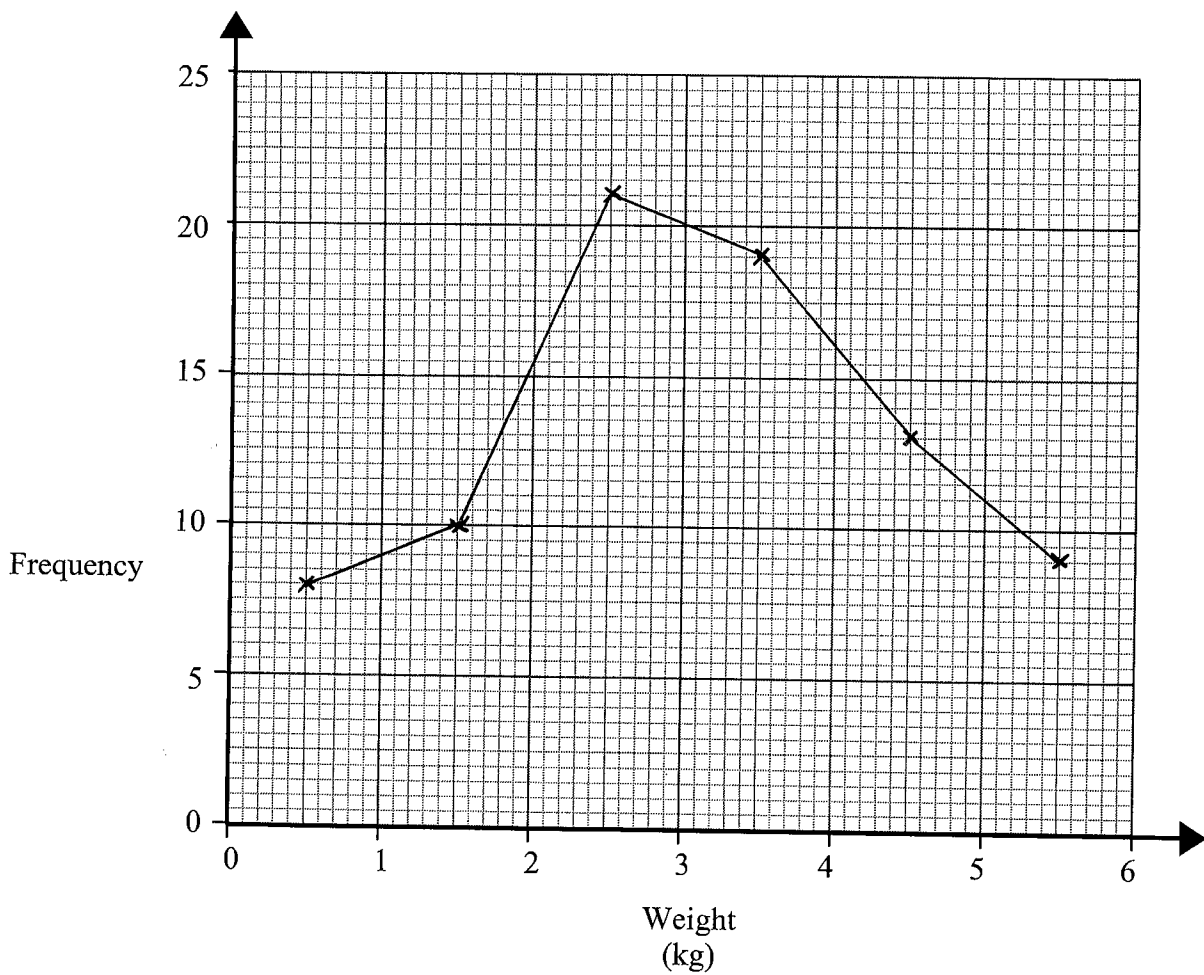


(Total for Question 2 is 2 marks)

3 The frequency table shows the weight, in kg, of some cats.

Weight (kg)	Frequency
$0 < w \leq 1$	8
$1 < w \leq 2$	10
$2 < w \leq 3$	21
$3 < w \leq 4$	19
$4 < w \leq 5$	13
$5 < w \leq 6$	9

Draw a frequency polygon to show this information.

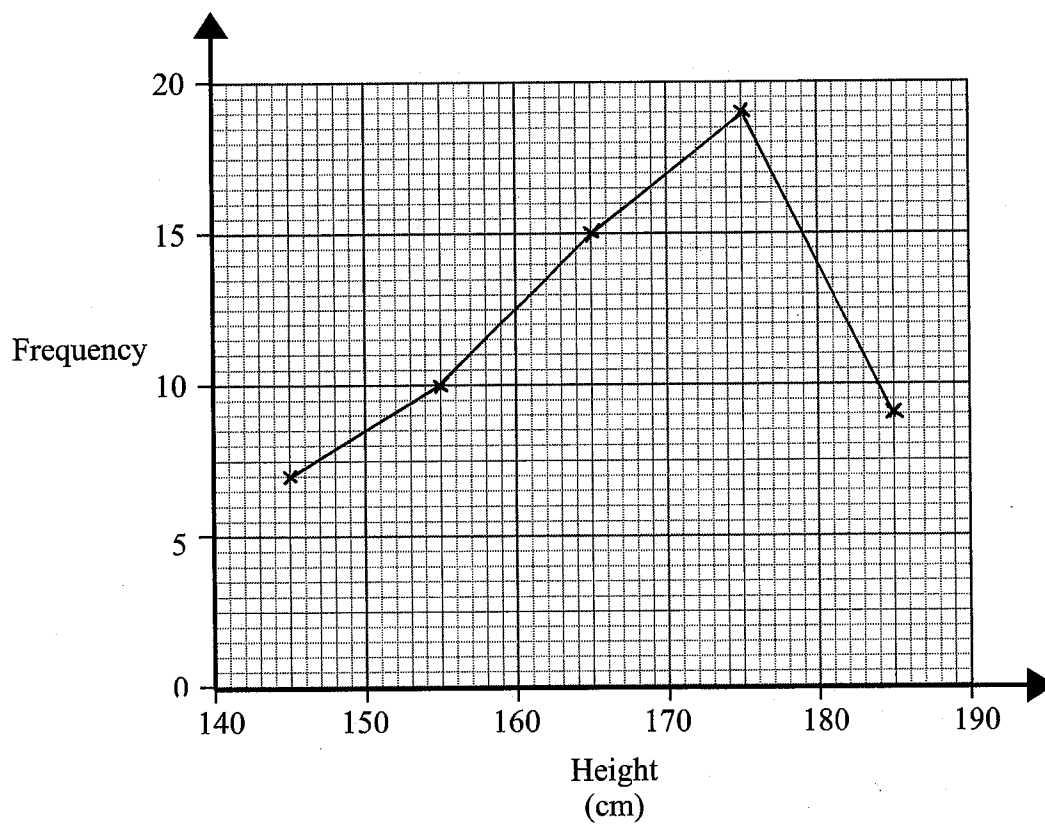


(Total for Question 3 is 2 marks)

4 The frequency table shows the heights, in cm, of some tomato plants.

Height (cm)	Frequency
$140 < h \leq 150$	7
$150 < h \leq 160$	10
$160 < h \leq 170$	15
$170 < h \leq 180$	19
$180 < h \leq 190$	9

Draw a frequency polygon to show this information.

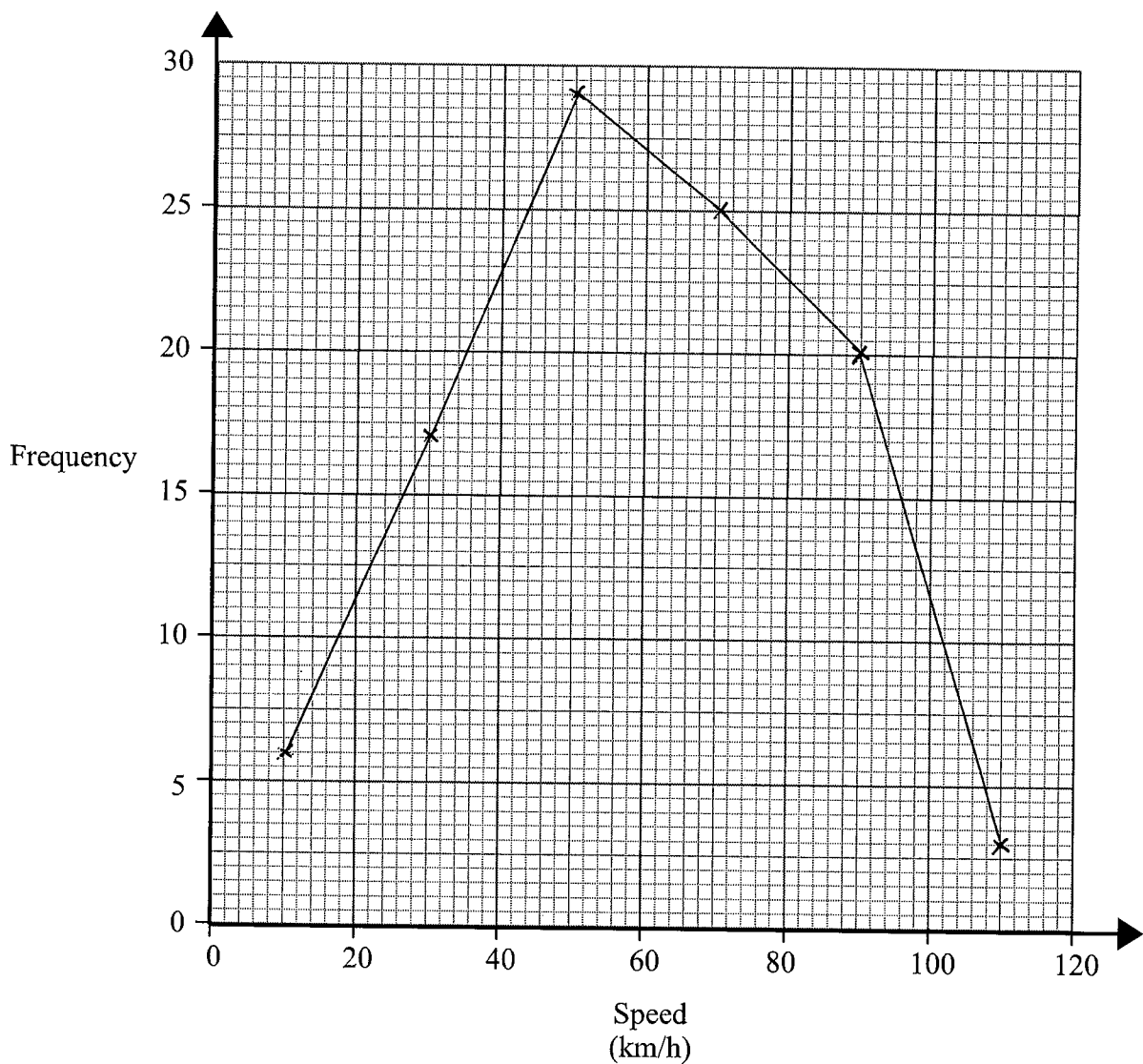


(Total for Question 4 is 2 marks)

5 The frequency table shows the speeds of 100 cars.

Speed (km/h)	Frequency
$0 < s \leq 20$	6
$20 < s \leq 40$	17
$40 < s \leq 60$	29
$60 < s \leq 80$	25
$80 < s \leq 100$	20
$100 < s \leq 120$	3

Draw a frequency polygon to show this information.

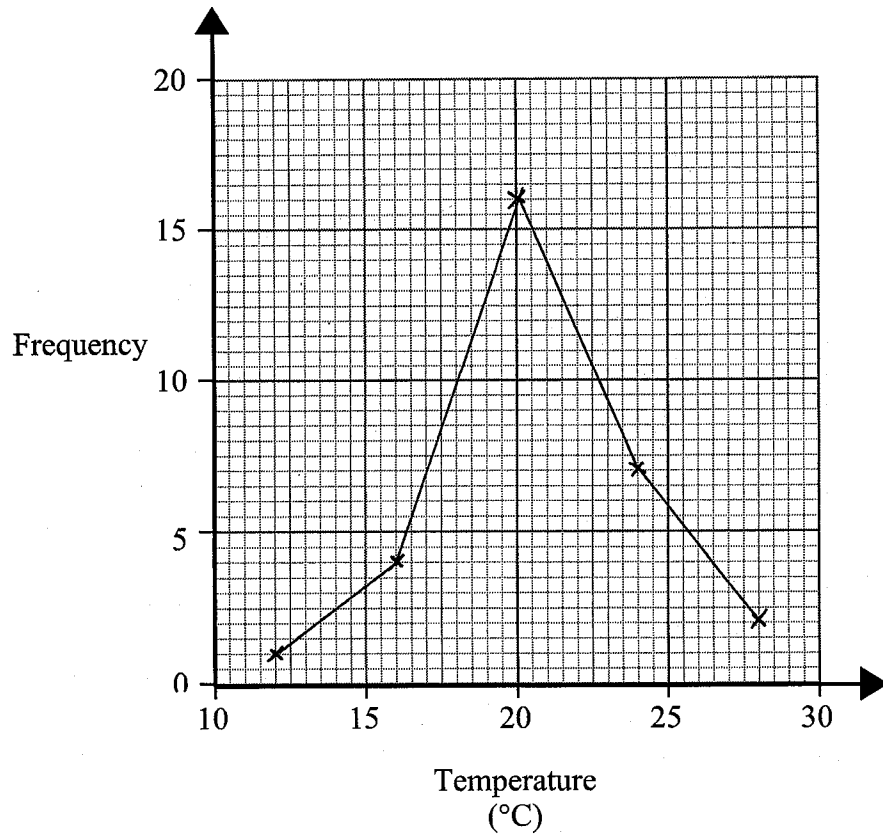


(Total for Question 5 is 2 marks)

6 The frequency table shows the temperature, in degrees, of 30 days.

Temperature ($^{\circ}\text{C}$)	Frequency
$10 < t \leq 14$	1
$14 < t \leq 18$	4
$18 < t \leq 22$	16
$22 < t \leq 26$	7
$26 < t \leq 30$	2

Draw a frequency polygon to show this information.

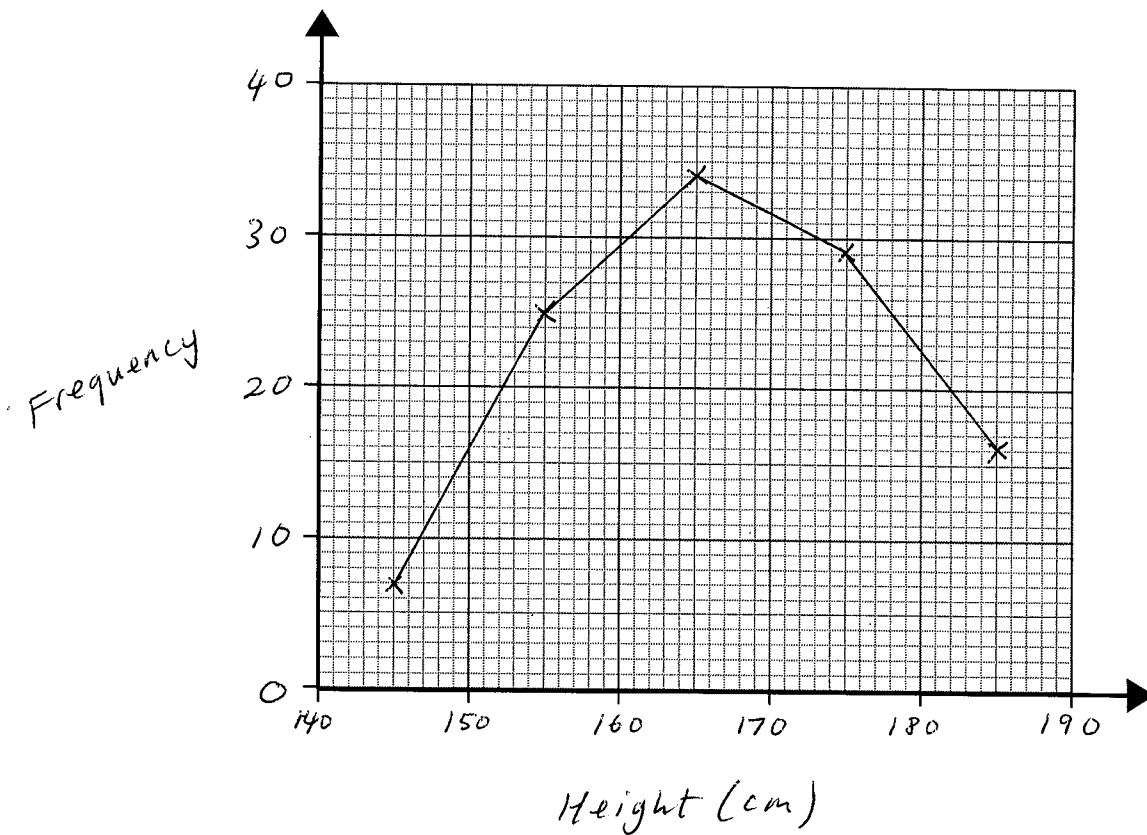


(Total for Question 6 is 2 marks)

7 The frequency table shows the heights, in cm, of some people.

Height (cm)	Frequency
$140 < h \leq 150$	7
$150 < h \leq 160$	25
$160 < h \leq 170$	34
$170 < h \leq 180$	29
$180 < h \leq 190$	16

Draw a frequency polygon to show this information.



(Total for Question 7 is 4 marks)