

Statistics – GCSE Mathematics Paper 1

1. No.8

- (a) For a set of five numbers,
the mode is 8
the median is 12

Work out **one** possible set of five numbers.**[2 marks]**

Answer _____

- (b) Here are the heights, in centimetres, of some children.

98 103 91 85 159 102 91

Which height is an outlier?

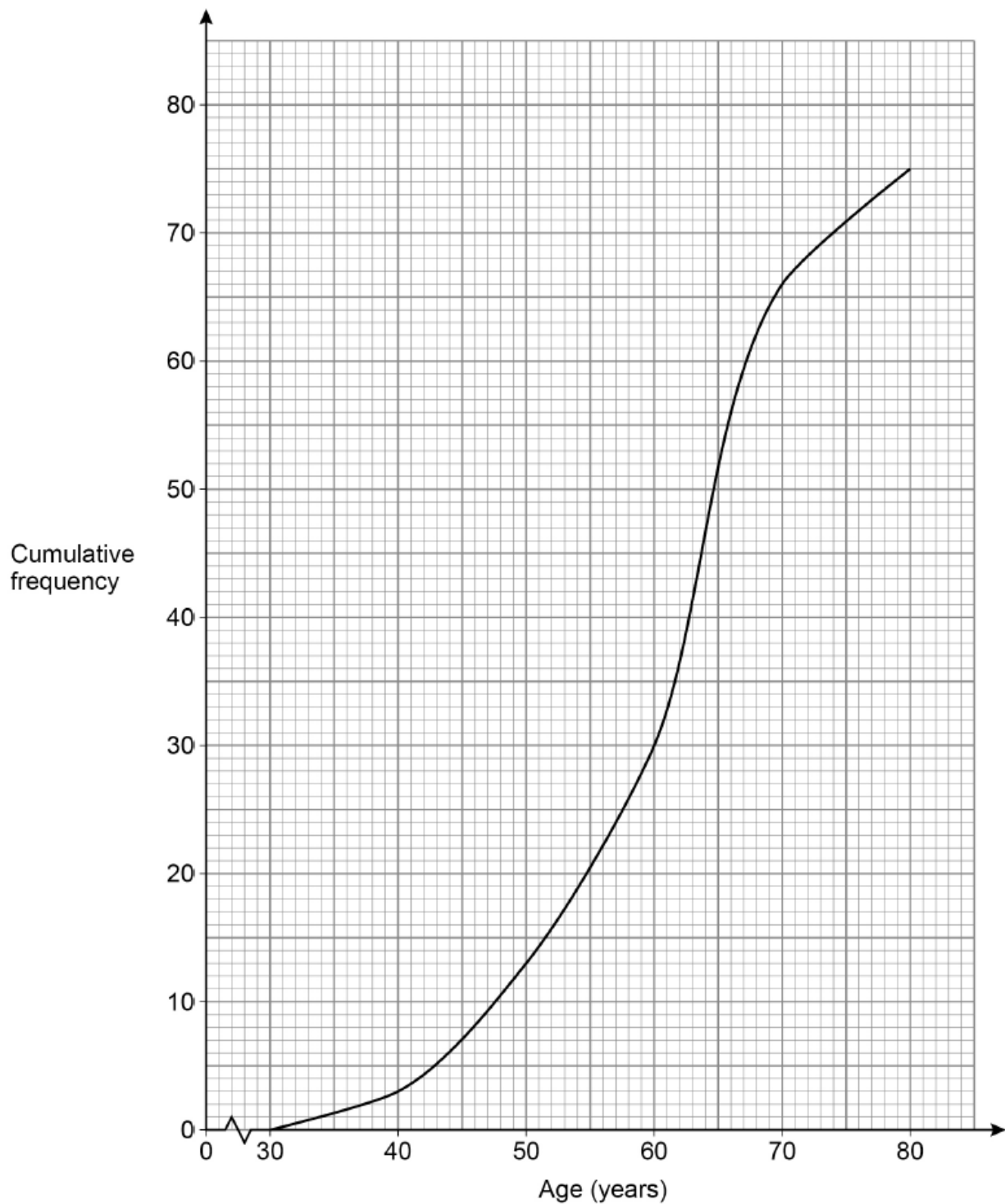
[1 mark]

Answer _____ cm

2. No.17

75 people attend a clinic.

Their ages are recorded and a cumulative frequency diagram is drawn.



A nurse makes a statement about the **ages** of the people at the clinic.

He says,

“More than twice as many people are in their 60s as in their 50s.”

Is he correct?

Tick a box.

Yes

☐

No

☐

Show working to support your answer.

[3 marks]

3. No.7

Rashid counted the pieces of homework he had done in three subjects.
He draws a pictogram to show the results.

Key:  represents 4 pieces of homework

Maths	    
English	   
Geography	

- (a) Rashid had done 5 pieces of Geography homework.

Show this information on the pictogram.

[1 mark]

- (b) Rashid spent 30 minutes on each piece of homework.

Work out the **total** time he spent on homework for these three subjects.

Give your answer in hours and minutes.

[3 marks]

Answer _____ hours _____ minutes

4. No.13

Katy records the number of cars using a drive-through each hour for 24 hours.

Here are the results.

36 20 37 53 42 41 24 18 39 35 40 47
 38 17 23 18 13 35 10 7 6 18 31 57

Katy makes this tally and frequency chart to put the data into groups.

Number of cars	Tally	Frequency
0 to 10		
10 to 20		
20 to 30		
30 to 40		
40 to 50		

Make **two** criticisms of Katy's tally and frequency chart.

You do **not** need to complete the chart.

[2 marks]

Criticism 1 _____

Criticism 2 _____

5. No.19

A company sells bags of toffees and bags of mints.

Here are the numbers of sweets in 11 bags of toffees.

55 50 49 51 55 47 54 50 49 55 57

Here are the numbers of sweets in 10 bags of mints.

46 47 47 48 48 50 53 54 54 54

The company claims that the average number of sweets per bag is at least 50

Using medians, is the company's claim correct for each type of sweet?

You **must** work out the median for toffees and the median for mints.

[4 marks]

Toffees _____

Tick a box for toffees.

☐

Yes

☐

No

Mints _____

Tick a box for mints.

☐

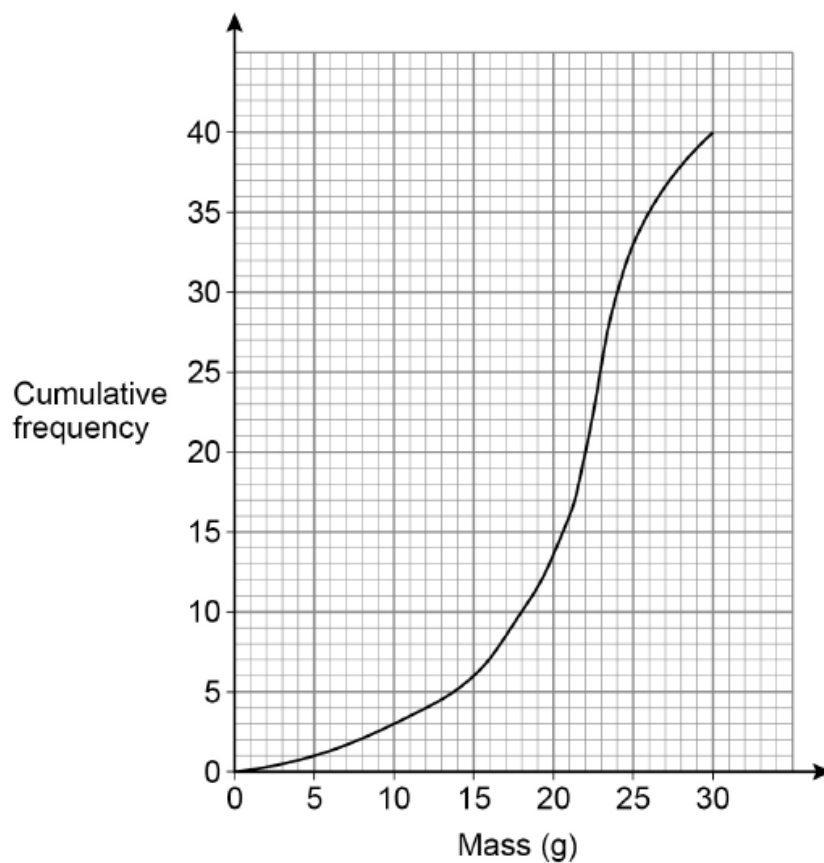
Yes

☐

No

6. No.16

The cumulative frequency graph represents the masses of 40 necklaces.



- (a) A jeweller buys every necklace with mass **greater than 21 grams**.

Use the graph to estimate how many she buys.

[2 marks]

Answer _____

- (b) The lowest mass was 3 grams.
The highest mass was 28 grams.

Draw a box plot to represent the data.

[3 marks]

