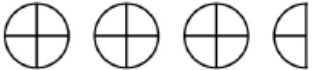**AQA – Statistics – GCSE Mathematics Paper_1**

1. June/2021/Paper_1F/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

2. June/2021/Paper_1F/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 _____

_____

_____

2

3. June/2021/Paper_1F/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 _____
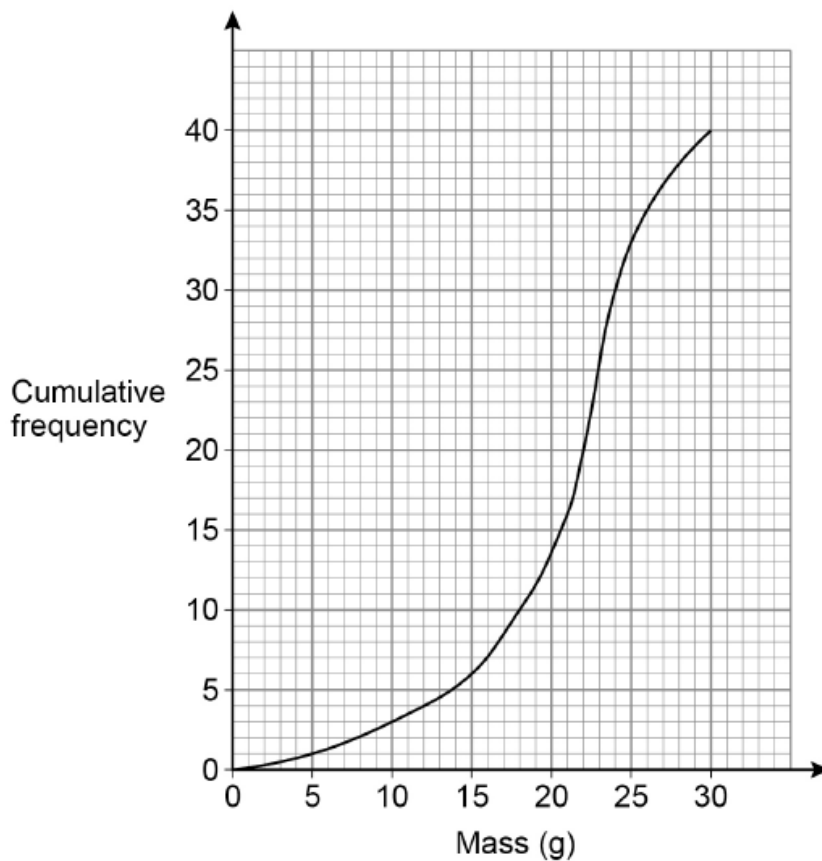
_____

_____

Tick a box for mints.

☐ Yes   ☐ No

4. June/2021/Paper_1H/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 _____

4

(b) The lowest mass was 3 grams.

The highest mass was 28 grams.

Draw a box plot to represent the data.

[3 marks]

Mass (g)