AQA - Interpretation of Data – GCSE Statistics – 2021

1. June/2022/Paper_8382/1F/No.8

The data show donations to a charity shop and the number of shoppers visiting the shop for each of 12 months in 2019.
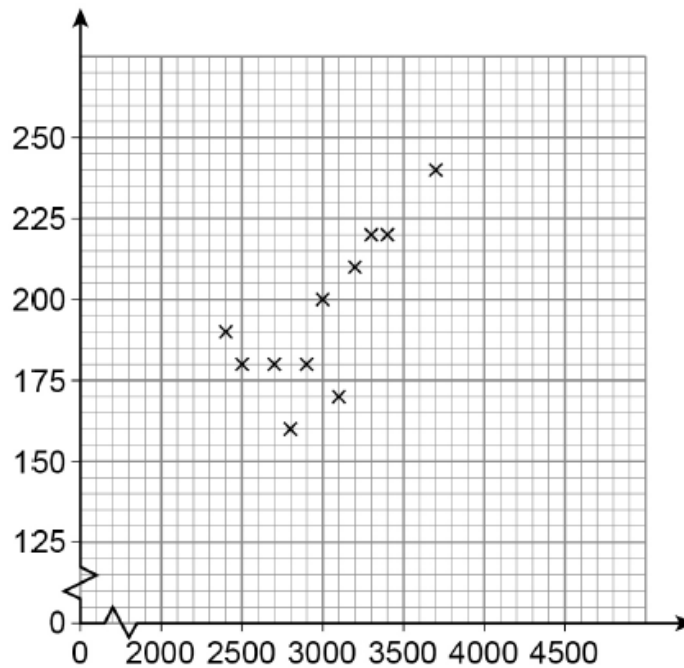
Both sets of data are rounded.

Month	Jan	Feb	Mar	Apr	May	Jun
Donations (nearest 100)	3200	2900	2700	3000	2800	3100
Shoppers (nearest 10)	210	180	180	200	160	170

Month	Jul	Aug	Sep	Oct	Nov	Dec
Donations (nearest 100)	2500	2400	3300	3400	3700	4200
Shoppers (nearest 10)	180	190	220	220	240	250

Jorja uses the data in the table to draw the following statistical diagram.

Graph to show donations to, and shoppers visiting, a charity shop

(a)   Complete the diagram by inserting the **three** things that are currently missing.

[3 marks]

(b)   Jorja is investigating **only** the **number of shoppers** visiting the shop each month.
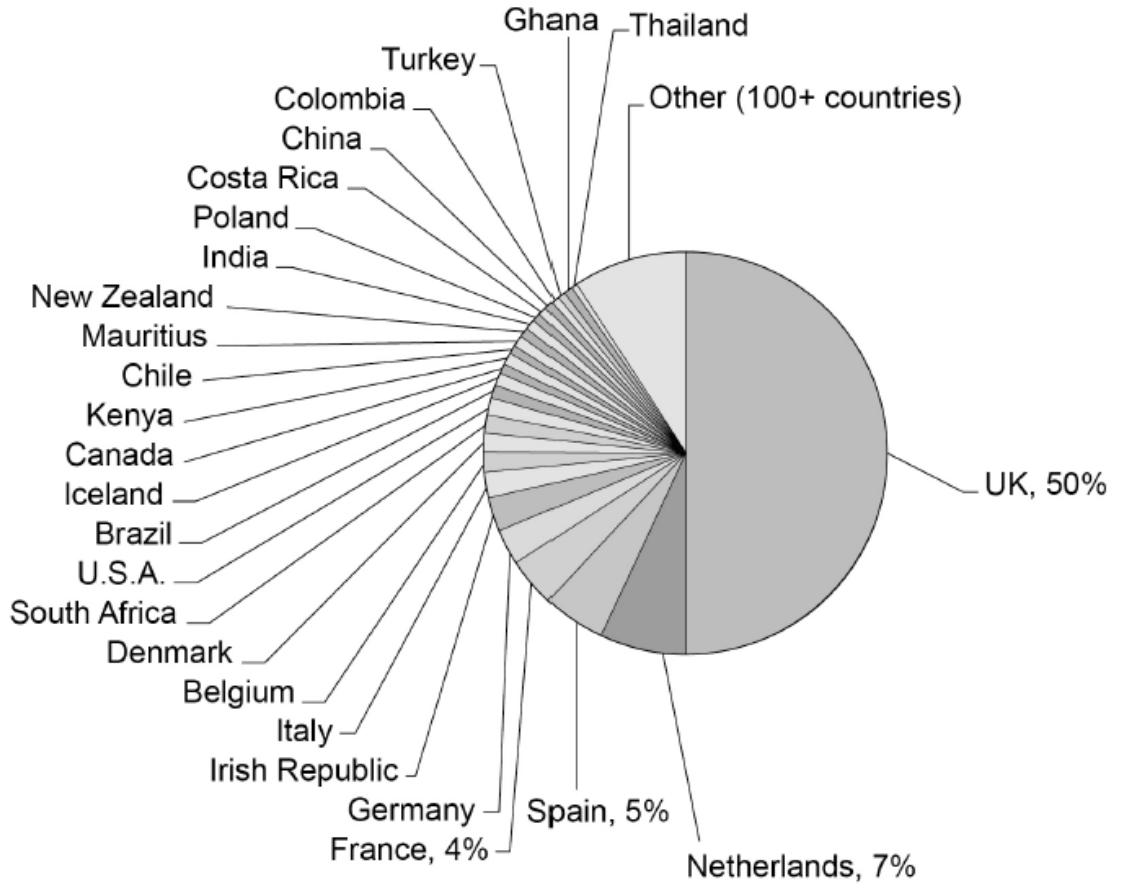
Comment on the appropriateness, for her investigation, of the **type** of diagram she has drawn.

[1 mark]

_____

_____

_____

2. June/2022/Paper_8382/1F/No.14

The pie chart shows information about the source of UK food in 2007.

Sources of food consumed in the UK by value: 2007

Source: Full Fact

Write down **two** criticisms of the diagram.

[2 marks]

Criticism 1 _____

_____

_____

Criticism 2 _____

_____

_____

3. June/2022/Paper_8382/1F/No.16

Natalie is selling her house.

At an asking price of £135 000, she is advised that the house would definitely sell within one month.

For each additional £1000 on the asking price, the risk of **not** selling within any one month increases by 0.05

(a)   Natalie wants £150 000 for her house.

(a) (i) At £150 000, what is the risk that she will **not** sell her house within one month?

[2 marks]

_____

_____

Answer _____

(a) (ii) At £150 000, what is the risk that she will **not** sell her house within two months?

[2 marks]

_____

_____

_____

Answer _____

(a) (iii) What assumption did you have to make in answering **part (a)(ii)**?

[1 mark]

_____

_____

(b) (i) Using the information given, what is the minimum price for which the house will apparently **never** sell?

[2 marks]

_____

_____

_____
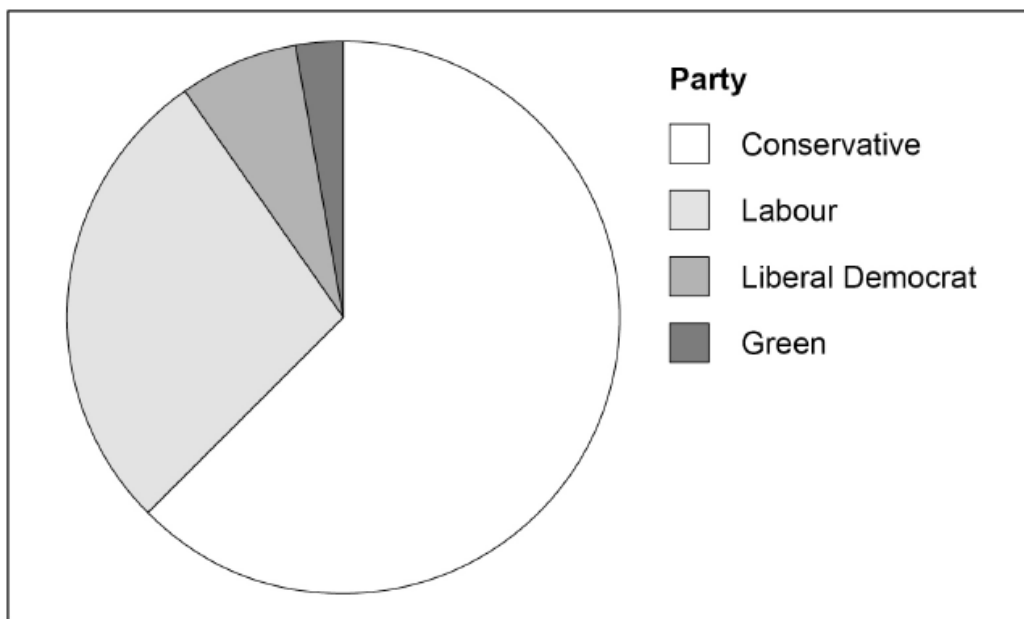
Answer £ _____

(b) (ii) Give a reason why the house may actually sell at this minimum price.

[1 mark]

_____

_____

4. June/2022/Paper_8382/2F/No.10

The pie chart shows information about how people voted in the Dartford area during the 2019 General Election.

Party

☐ Conservative
☐ Labour
☐ Liberal Democrat
☐ Green

(a) Which party had the most votes?

[1 mark]

_____

(b) 54 000 people are represented in the pie chart.

Work out how many of them voted for Labour.

[3 marks]

_____

_____

_____

_____

Answer _____

5. June/2022/Paper_8382/2H/No.5

BMI stands for Body Mass Index and is based on your height and mass.

(a) Louise and William have this hypothesis,

"Our classmates have a lower BMI than other Year 11 students in the country."

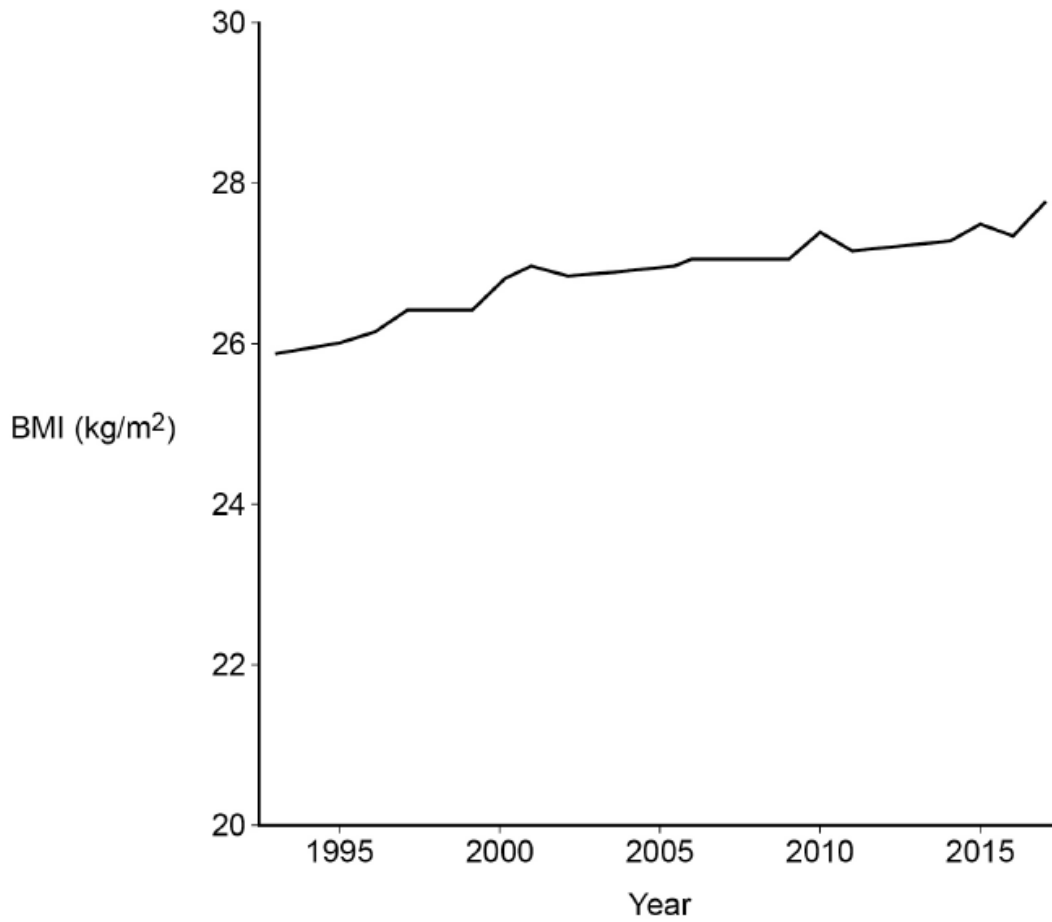They collect height and mass data from some of their classmates.

Gender	Height (m)	Mass (kg)
Female	1.38	51
Female	1.27	48
Female	1.31	39
Female	1.42	45
Female	1.52	55
Male	1.68	71
Male	1.60	65
Male	1.74	82
Female	1.38	51
Male	1.69	78

Give **one** criticism of the collected data.

[1 mark]

_____

_____

7

(b) The graph shows the average adult BMI over recent years.

Adults' Average BMI (body mass index)

Source: NHS Digital

A healthy BMI is considered to be between 18.5 and 24.9

Make **two** distinct comments about the graph.

[2 marks]

1 _____

_____

_____

2 _____

_____

_____