Statistics

*You may **not** use a calculator for these questions.*

1 Henry carries out a survey about people's favourite TV programme. He asks 10 of his friends.
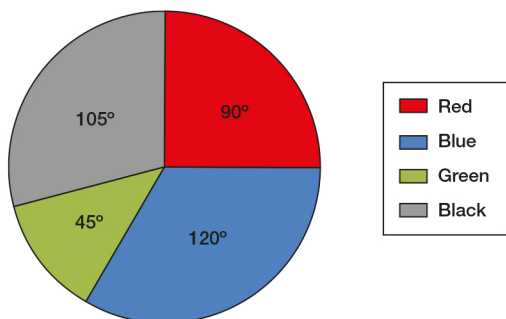
Give two reasons why his sample is biased.

2 India carried out a survey of 20 students to find out what their favourite pizza toppings were.

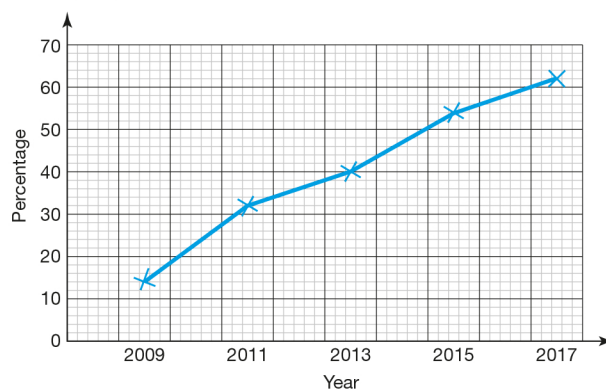The table gives information about her results.

Topping	Frequency
Margherita	11
Vegetarian	2
Hawaiian	6
Pepperoni	1

a Which topping is the mode?

b In India's survey, what percentage of people like pepperoni best?

c India is going to draw a pie chart to display her information. What angle should the sector for pepperoni be?

3 The pie chart below shows the colour of electric cars sold by a garage one year.

a What fraction of the cars sold were red?

60 green cars were sold.

b How many cars does the whole pie chart represent?

c How many black cars were sold?

4 The graph gives information about the percentage of people who do their grocery shopping online.

a Describe the trend in the percentage of people who do their grocery shopping online.

b Use your graph to predict the percentage of people who will shop online in 2019.

c Is your predication reliable? Explain your answer.

5 The mean, median, mode and range of a set of four numbers is calculated.

Mean $= 6$

Mode $= 7$

Median $= 7$

Range $= 6$

Which of the following statements are true?

a All of the numbers are positive.

b At least one of the numbers is 7.

c Two of the numbers are 7.

d Three of the numbers are 7.