



ACHIEVE ACADEMY

GCSE Maths — Higher Tier

Data Representation: Bar Charts & Pie Charts · Practice Booklet

NAME: _____

CLASS: _____

DATE: _____

☐ Developing

☒ Secure

☐ Greater Depth

Answer every question in the working space provided. Method marks are available for correct working even if the final answer is wrong. Check the time allowed with your tutor before you start.

Data Representation: Bar Charts & Pie Charts

Total marks available: 91

● Data Representation: Bar Charts & Pie Charts

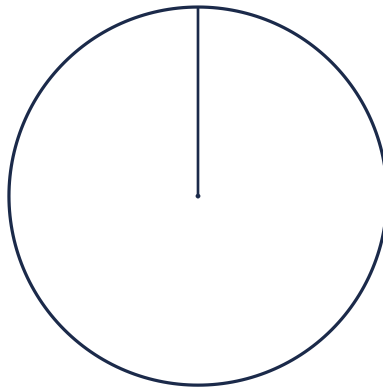
Q1

[4 marks]

The table shows the favourite transport of 72 employees.

- (a) Complete the table by working out the angle for each sector.
(b) Draw a pie chart to show the information.

Transport	Frequency	Angle
Bus	17	
Car	12	
Walk	8	
Cycle	35	



Q2

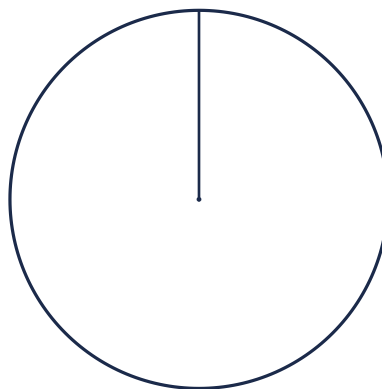
[4 marks]

The table shows the favourite sport of 90 students.

(a) Complete the table by working out the angle for each sector.

(b) Draw a pie chart to show the information.

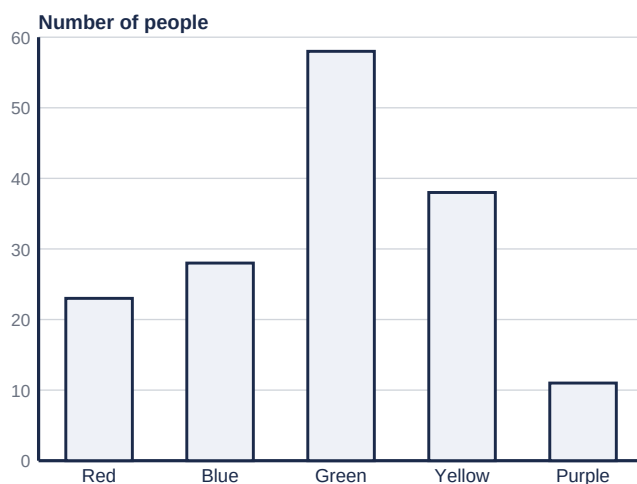
Sport	Frequency	Angle
Football	13	
Rugby	14	
Netball	30	
Hockey	33	



Q3

[2 marks]

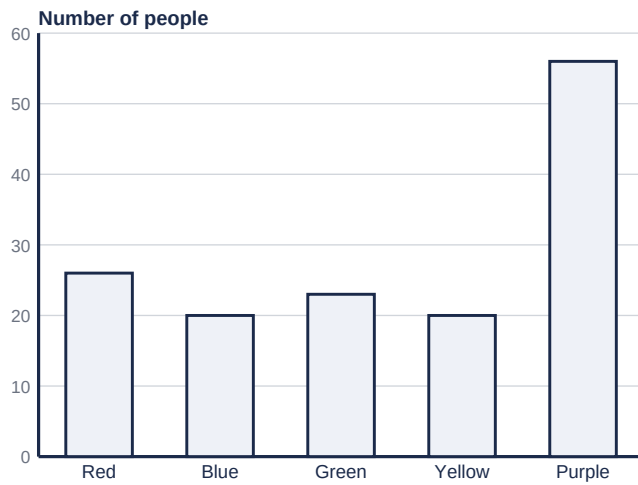
The bar chart shows favourite colour for a group of people. Find the total number of people represented.



Q4

[2 marks]

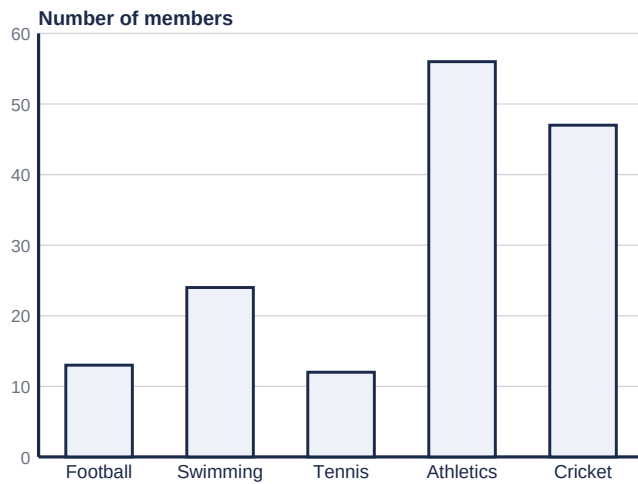
The bar chart shows favourite colour for a group of people. Find the total number of people represented.



Q5

[2 marks]

The bar chart shows favourite sport for a group of members. Find the total number of members represented.



Q6

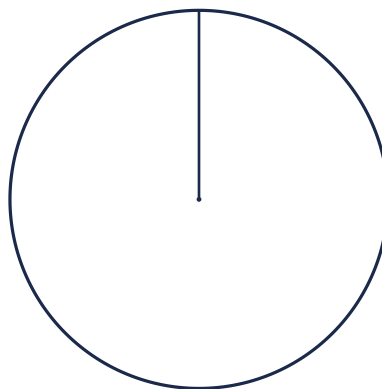
[4 marks]

The table shows the favourite type of film of 72 viewers.

(a) Complete the table by working out the angle for each sector.

(b) Draw a pie chart to show the information.

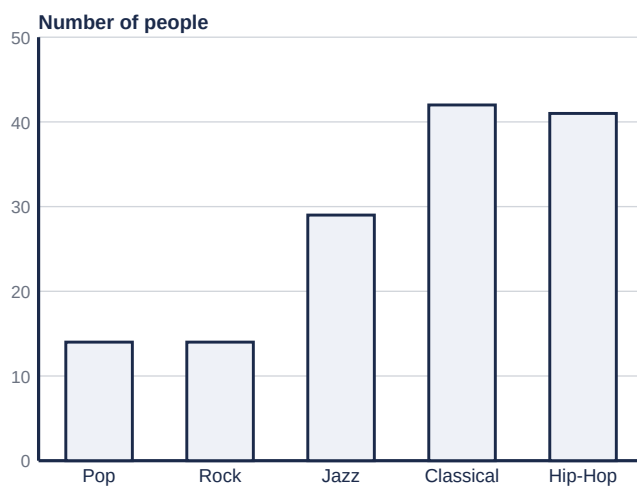
Type of film	Frequency	Angle
Comedy	27	
Drama	28	
Action	11	
Documentary	6	



Q7

[2 marks]

The bar chart shows favourite music genre for a group of people. Find the total number of people represented.

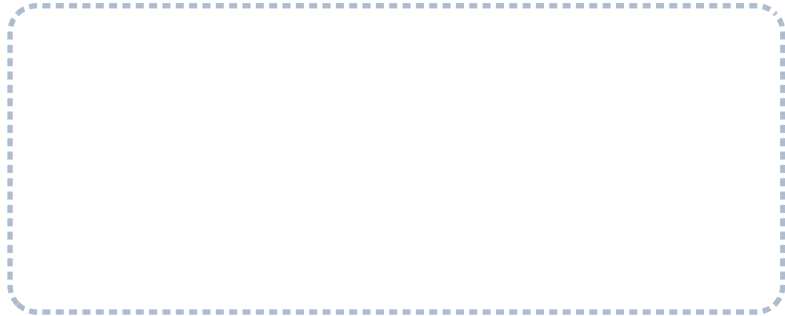


Q8

[2 marks]

The table shows information about the favourite type of film of 40 viewers. A pie chart is drawn to show this information. Work out the angle of the sector for Comedy.

Type of film	Frequency
Comedy	7
Drama	11
Action	8
Documentary	14

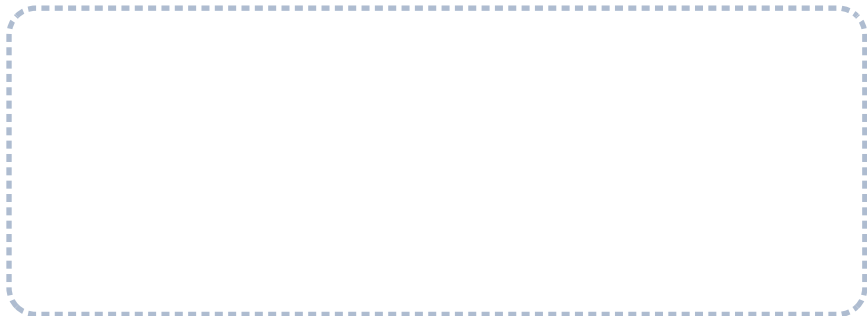


Q9

[2 marks]

The table shows information about the favourite pet of 45 households. A pie chart is drawn to show this information. Work out the angle of the sector for Cats.

Pet	Frequency
Cats	15
Dogs	11
Fish	13
Birds	6

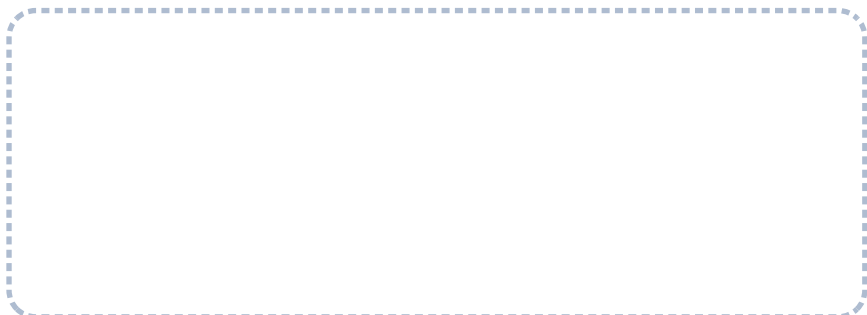


Q10

[2 marks]

The table shows information about the favourite pet of 90 households. A pie chart is drawn to show this information. Work out the angle of the sector for Dogs.

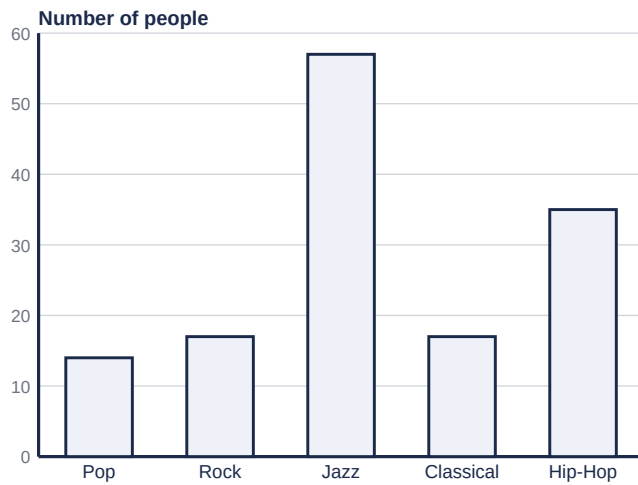
Pet	Frequency
Cats	8
Dogs	18
Fish	31
Birds	33



Q11

[3 marks]

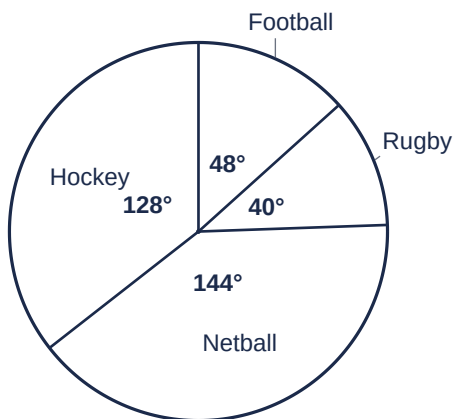
The bar chart shows favourite music genre for a group of people. What percentage of the people chose Jazz? Give your answer correct to 1 decimal place.



Q12

[3 marks]

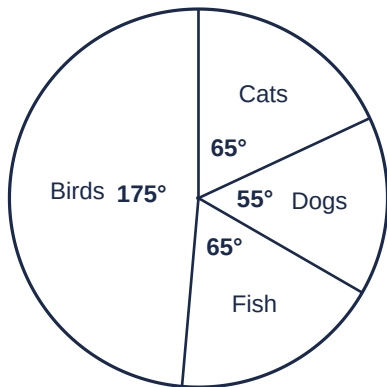
The pie chart shows the favourite sport of some students. 16 students chose Hockey. Work out the total number of students.



Q13

[3 marks]

The pie chart shows the favourite pet of some households. 11 households chose Dogs. Work out the total number of households.



Q14

[3 marks]

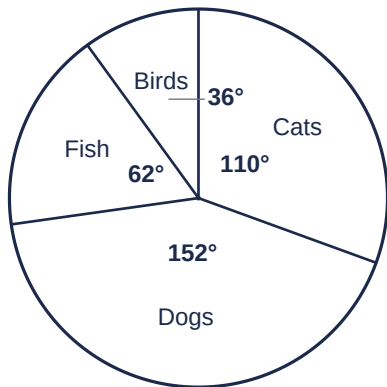
The bar chart shows favourite sport for a group of members. What percentage of the members chose Athletics? Give your answer correct to 1 decimal place.



Q15

[3 marks]

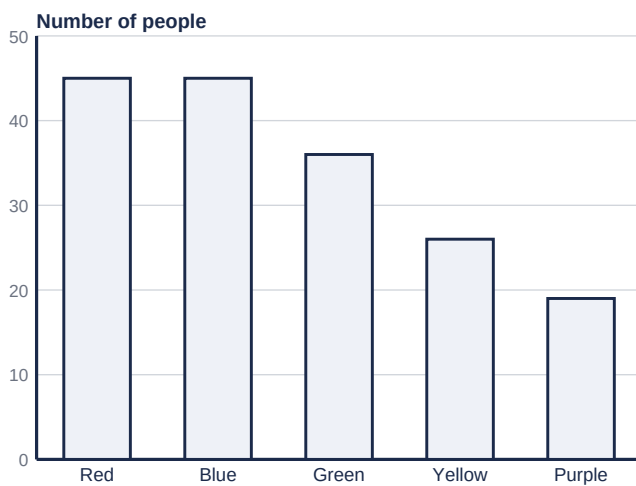
The pie chart shows the favourite pet of some households. 18 households chose Birds. Work out the total number of households.



Q16

[3 marks]

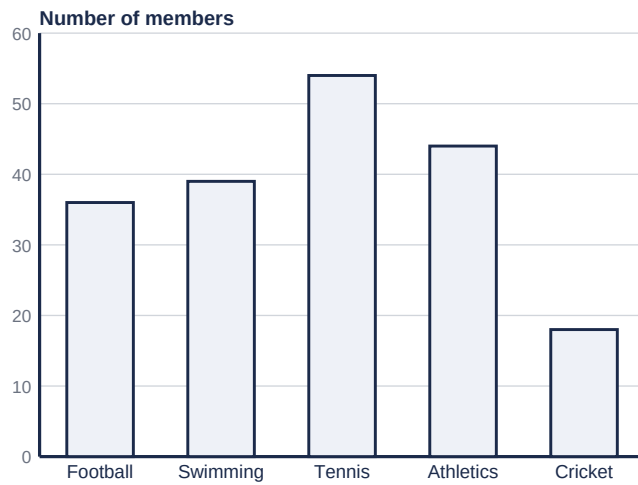
The bar chart shows favourite colour for a group of people. What percentage of the people chose Blue? Give your answer correct to 1 decimal place.



Q17

[3 marks]

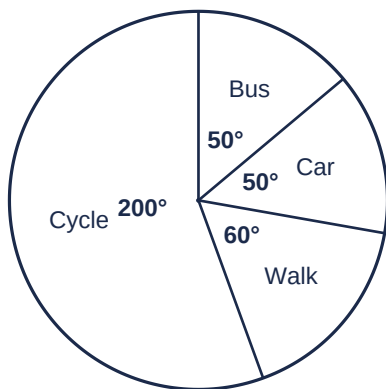
The bar chart shows favourite sport for a group of members. What percentage of the members chose Swimming? Give your answer correct to 1 decimal place.



Q18

[3 marks]

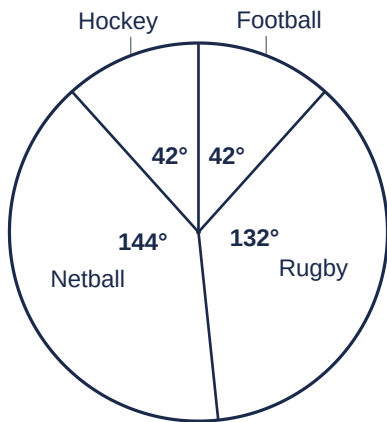
The pie chart shows the favourite transport of some employees. 10 employees chose Car. Work out the total number of employees.



Q19

[3 marks]

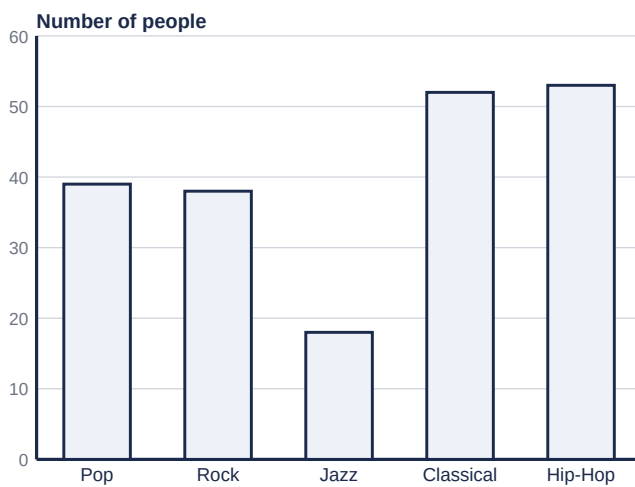
The pie chart shows the favourite sport of some students. 7 students chose Hockey. Work out the total number of students.



Q20

[3 marks]

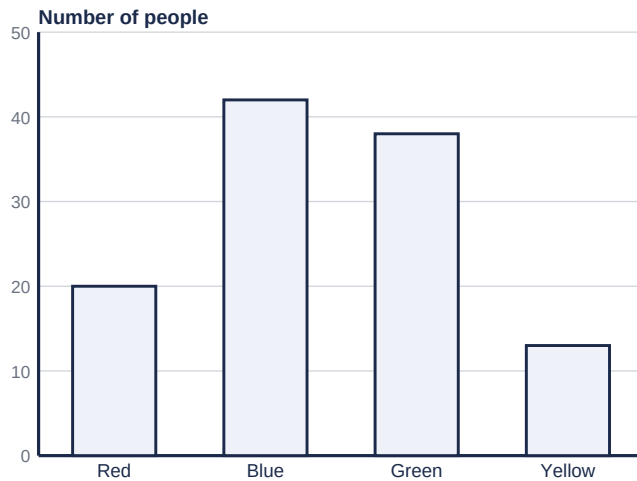
The bar chart shows favourite music genre for a group of people. What percentage of the people chose Pop? Give your answer correct to 1 decimal place.



Q21

[3 marks]

The bar chart shows favourite colour for 4 of 5 categories in a survey of people. The category Purple is not shown. If the total number of people surveyed was 154, find the number of people who chose Purple.

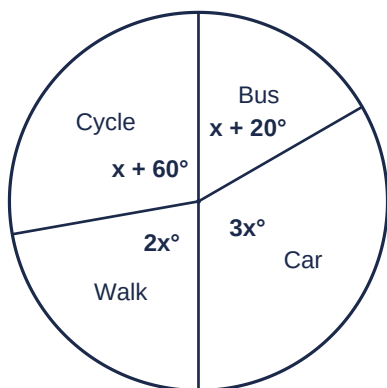


Q22

[4 marks]

The pie chart shows the favourite transport of 36 employees. The angles are given in terms of x .

- (a) Work out the value of x .
(b) Work out the number of employees who chose Bus.



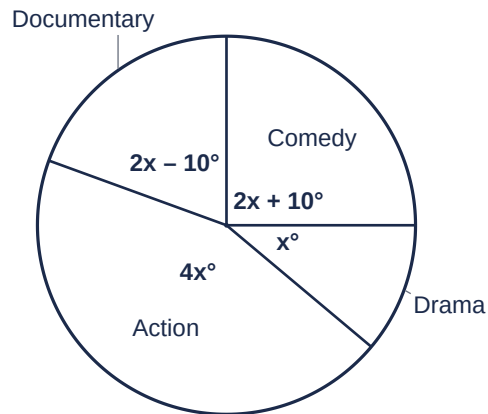
Q23

[4 marks]

The pie chart shows the favourite type of film of 360 viewers. The angles are given in terms of x .

(a) Work out the value of x .

(b) Work out the number of viewers who chose Comedy.



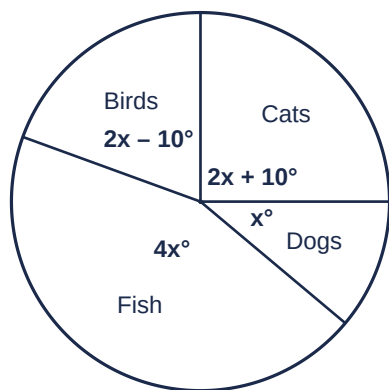
Q24

[4 marks]

The pie chart shows the favourite pet of 360 households. The angles are given in terms of x .

(a) Work out the value of x .

(b) Work out the number of households who chose Fish.



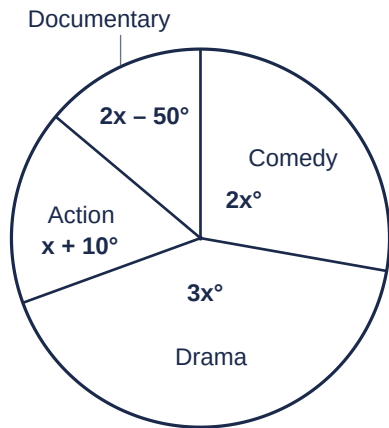
Q25

[4 marks]

The pie chart shows the favourite type of film of 36 viewers. The angles are given in terms of x .

(a) Work out the value of x .

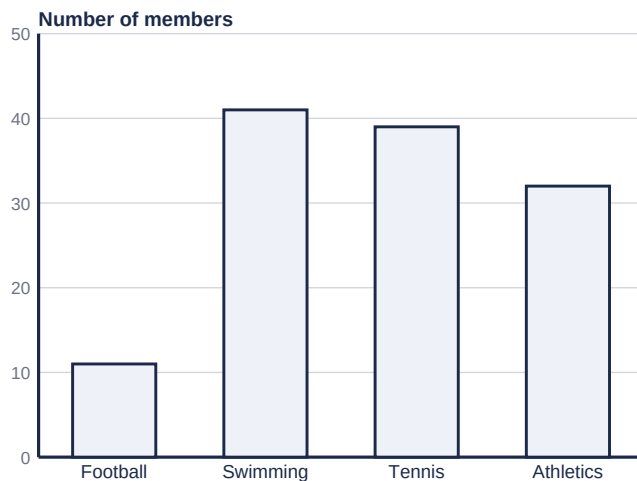
(b) Work out the number of viewers who chose Comedy.



Q26

[3 marks]

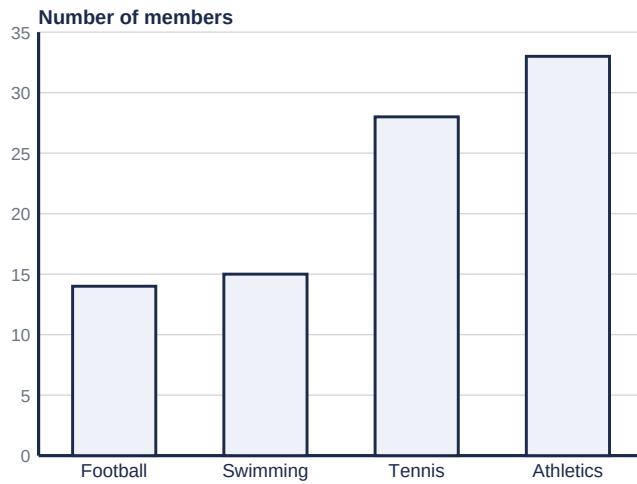
The bar chart shows favourite sport for 4 of 5 categories in a survey of members. The category Cricket is not shown. If the total number of members surveyed was 173, find the number of members who chose Cricket.



Q27

[3 marks]

The bar chart shows favourite sport for 4 of 5 categories in a survey of members. The category Cricket is not shown. If the total number of members surveyed was 140, find the number of members who chose Cricket.

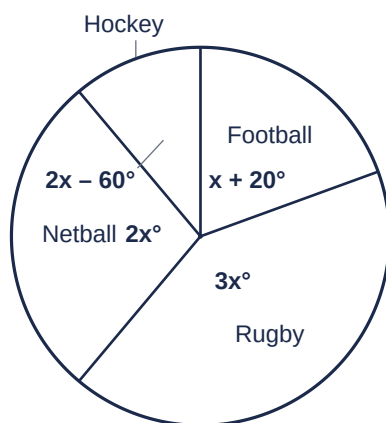


Q28

[4 marks]

The pie chart shows the favourite sport of 360 students. The angles are given in terms of x .

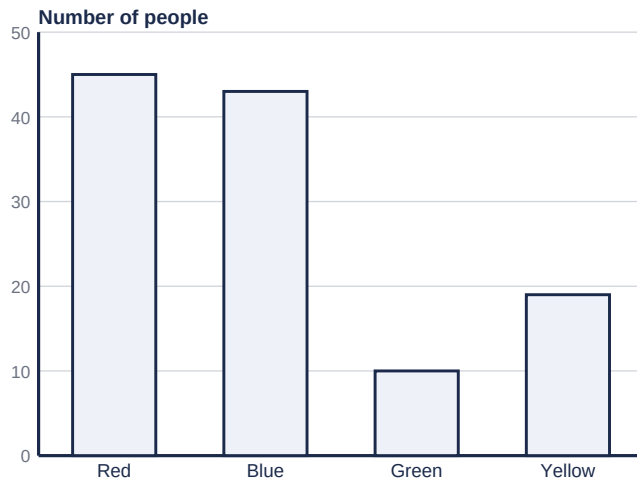
- (a) Work out the value of x .
 (b) Work out the number of students who chose Netball.



Q29

[3 marks]

The bar chart shows favourite colour for 4 of 5 categories in a survey of people. The category Purple is not shown. If the total number of people surveyed was 161, find the number of people who chose Purple.



Q30

[3 marks]

The bar chart shows favourite colour for 4 of 5 categories in a survey of people. The category Purple is not shown. If the total number of people surveyed was 175, find the number of people who chose Purple.

