

PIE CHARTS

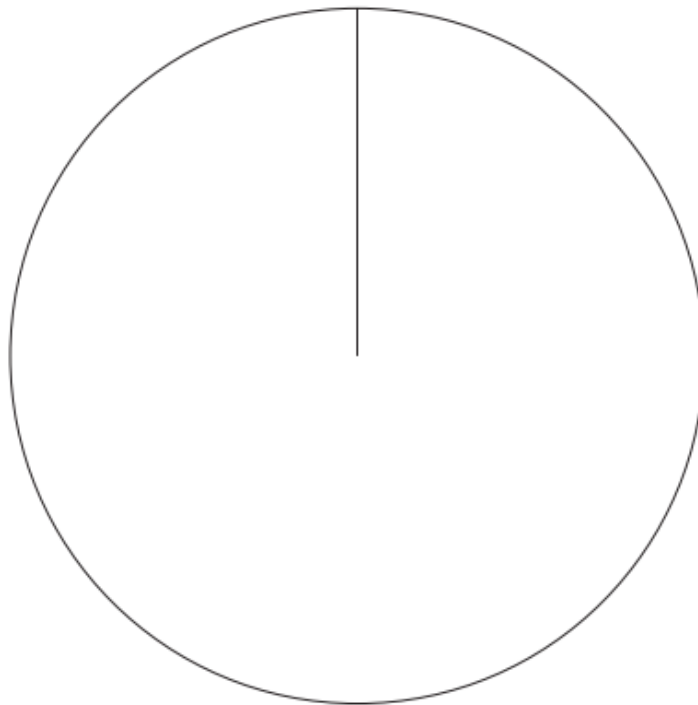
Pearson Edexcel - Thursday 4 June 2020 - Paper 2 (Calculator) Foundation Tier

1.

14 The table gives information about the number of goals scored by each of three teams.

Team	Number of goals
City	50
Rovers	45
United	25

Draw an accurate pie chart for this information.



(Total for Question 14 is 3 marks)

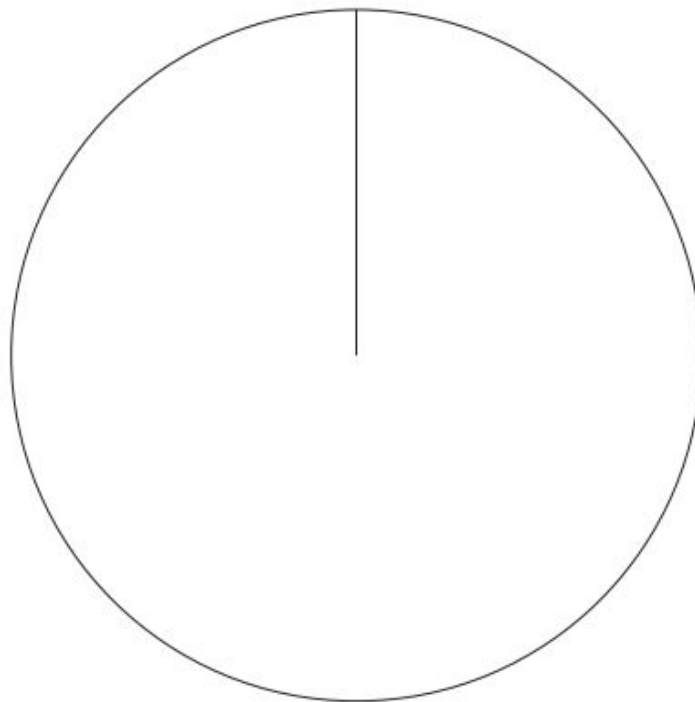
2.

12 Joan asked each of 60 people to name their favourite vegetable.

Here are her results.

Vegetable	Frequency
Peas	24
Carrots	16
Mushrooms	20

Draw an accurate pie chart for her results.



(Total for Question 12 is 3 marks)

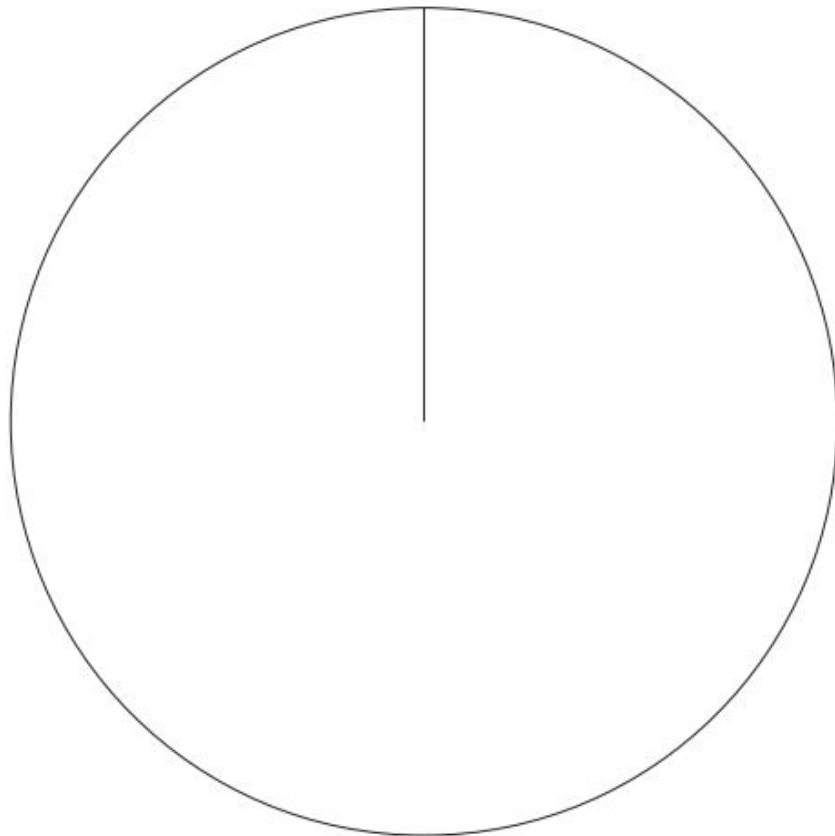
3.

12 A group of football fans were asked what their half time snack was.

The table below gives information about their answers.

Snack	Number of fans
burger	11
pie	17
hot dog	8

Draw an accurate pie chart for this information.



(Total for Question 12 is 3 marks)

4.

5 60 students were asked how they get to school.

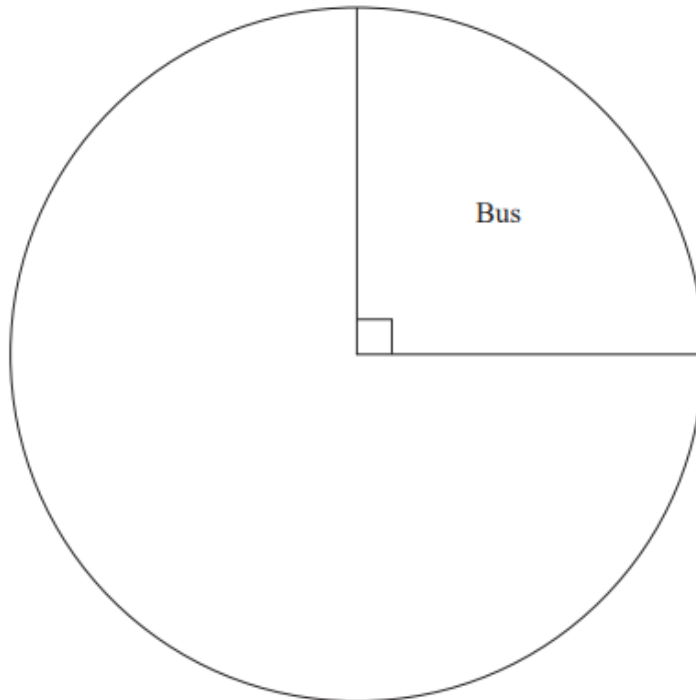
The table shows the results.

	Bus	Walk	Car	Bicycle
Number of students	15	27	12	6

(a) What fraction of the 60 students did **not** walk to school?

(2)

(b) Complete the pie chart for the information in the table.



(4)

(Total for Question 5 is 6 marks)

Pearson Edexcel – Specimen 2 - Paper 2 (Calculator) Foundation Tier

5.

8 Rachel carried out a survey of 10 people to find out the type of fruit they like best.

The table gives information about her results.

Type of fruit	Number of people
apple	2
banana	5
orange	3

(a) Which type of fruit is the mode?

.....
(1)

In Rachel's survey, 2 out of 10 people like apples best.

(b) Write 2 out of 10 as a percentage.

.....%
(1)

Pete also carried out a survey to find out the type of fruit people like best. He asked 30 people which type of fruit they like best.

He drew this pie chart for his results.

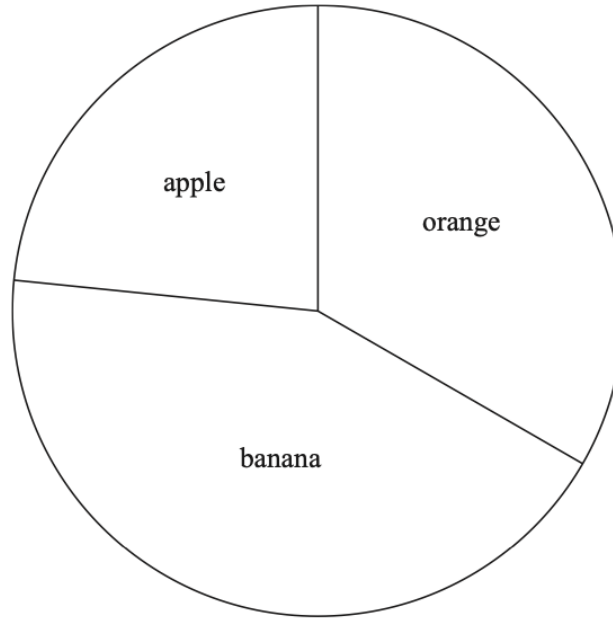


Diagram
accurately drawn

A smaller proportion of people like bananas best in Pete's survey than in Rachel's survey.

(c) Explain how Pete's pie chart and Rachel's table show this.

.....

.....

.....

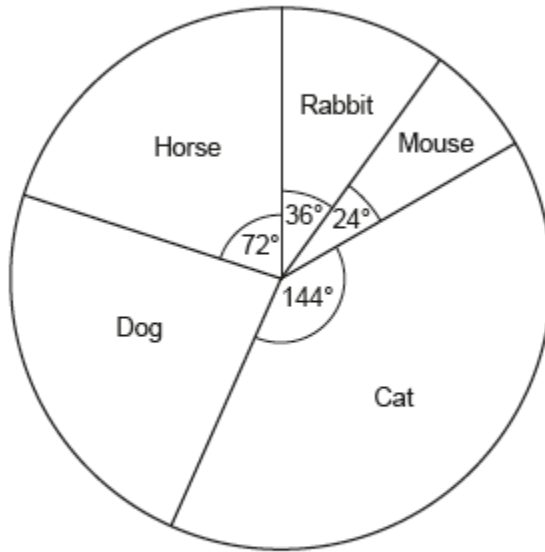
(2)

(Total for Question 8 is 4 marks)

OCR Monday 11 November 2019 – Afternoon (Calculator) Foundation Tier

6.

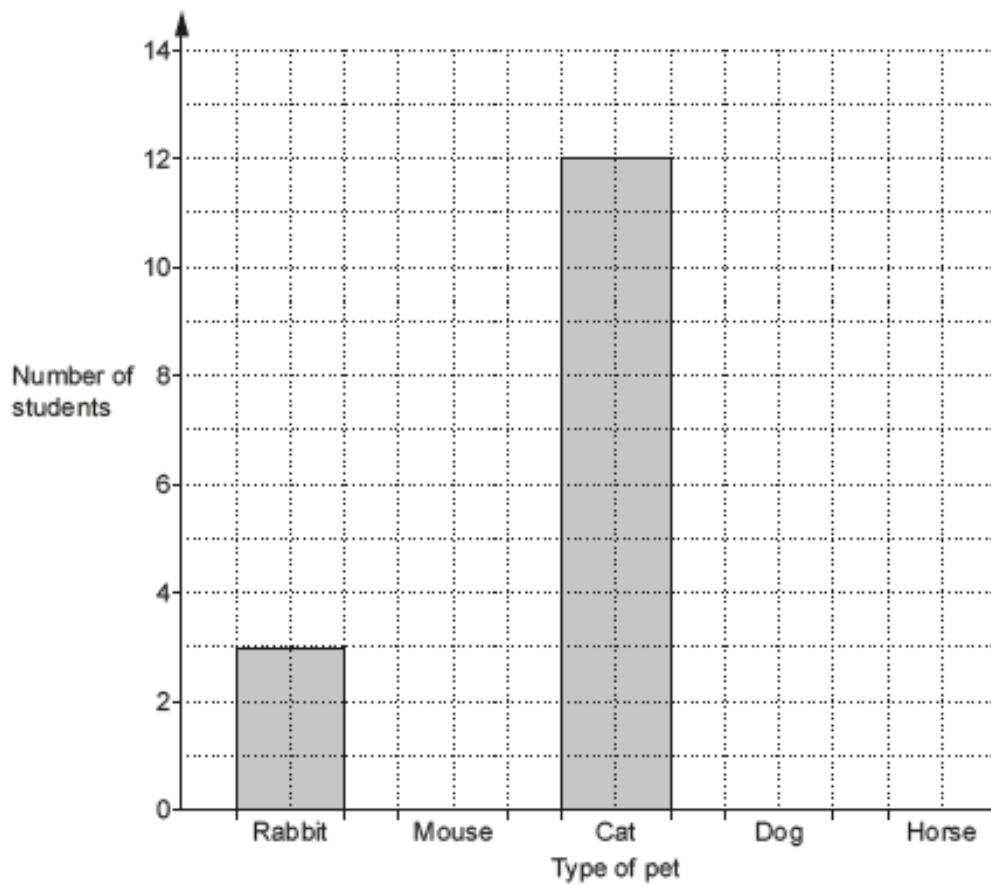
- 6 30 students each own one pet.
The pie chart shows the proportion of each type of pet owned by the 30 students.



(a) Which type of pet is the mode?

(a) [1]

(b) Use the information in the pie chart to complete this bar chart.



[3]

OCR Tuesday 11 June 2019 – Morning (Calculator) Foundation Tier

7.

10 The pie chart shows how Jack spent his time one evening.



(a) On which activity did Jack spend most time?

(a) [1]

(b) Jack says

I spent $\frac{1}{3}$ of my time on Gaming.

Show that he is not correct.

..... [2]

(c) The pie chart represents 5 hours.

Find the time, in hours and minutes, that Jack spent reading.

(c) h min [4]

OCR Monday 12 November 2018 – Morning (Calculator) Foundation Tier

8.

- 14 30 people choose their favourite sport.
Matt wants to show their choices in a pie chart.
4 of the people chose 'tennis'.

Work out the angle of the sector for 'tennis'.

.....° [3]

OCR Tuesday 12 June 2018– Morning (Calculator) Foundation Tier

9.

- 8 Two groups of students go on a water sport holiday.
Each student chooses one activity.

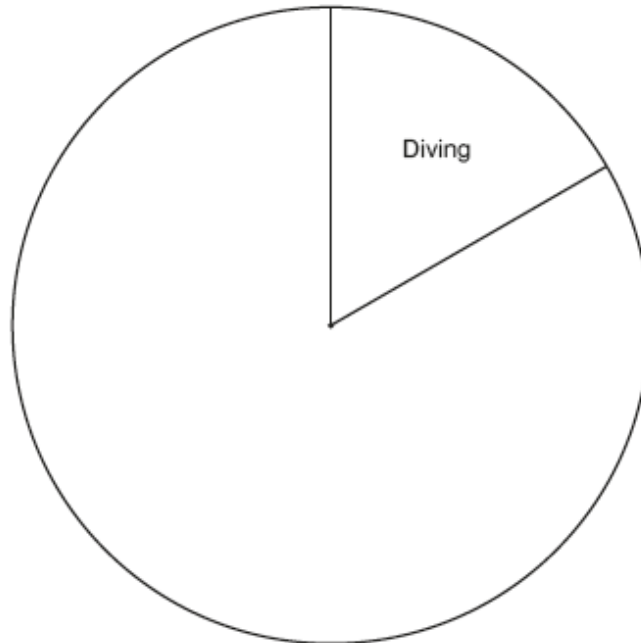
Students in **Group A** choose from Diving, Swimming, Paddleboarding and Kayaking.
Their choices are to be shown in a pie chart.

- (a) Complete this table for Group A.

Activity	Number of students	Angle of sector
Diving	5	60°
Swimming		120°
Paddleboarding		
Kayaking	9	108°

[4]

- (b) Complete the pie chart for Group A.



[2]

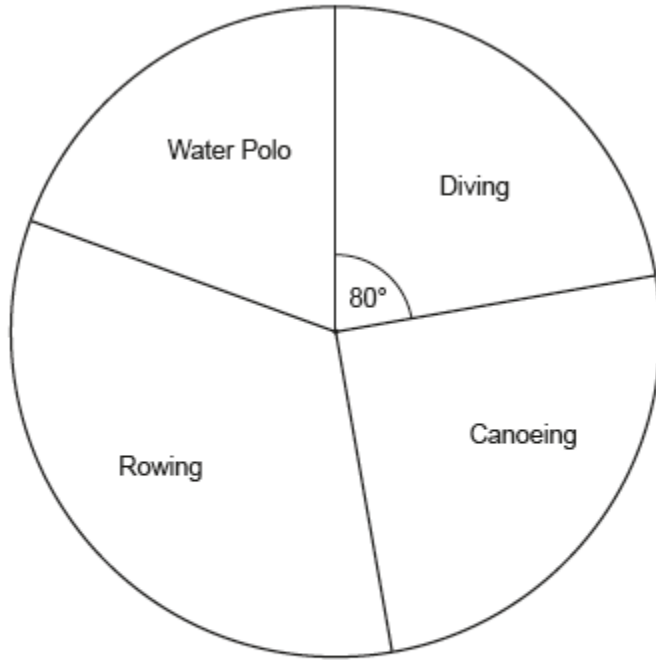
- (c) One student in Group A changes activity.
There is now a new modal activity for Group A.

Write down the student's original activity and new activity.

original activity.....

new activity..... [1]

(d) The choices made by **Group B** are shown in this pie chart.



A teacher thinks more students chose Diving in Group B than in Group A.

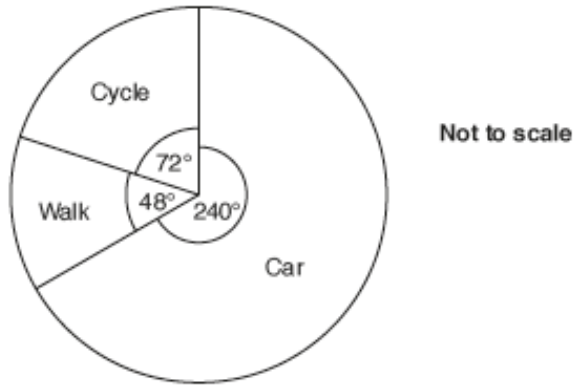
Give a reason why the teacher may be wrong.

.....
..... [1]

OCR Monday 6 November 2017– Morning (Calculator) Foundation Tier

10.

10 This pie chart shows how the employees of a business travel to work.



- (a) Find the ratio of the number of employees who cycle to work to the number of employees who walk to work.
Give your answer in its simplest form.

(a) : [2]

- (b) 80 employees travel to work by car.

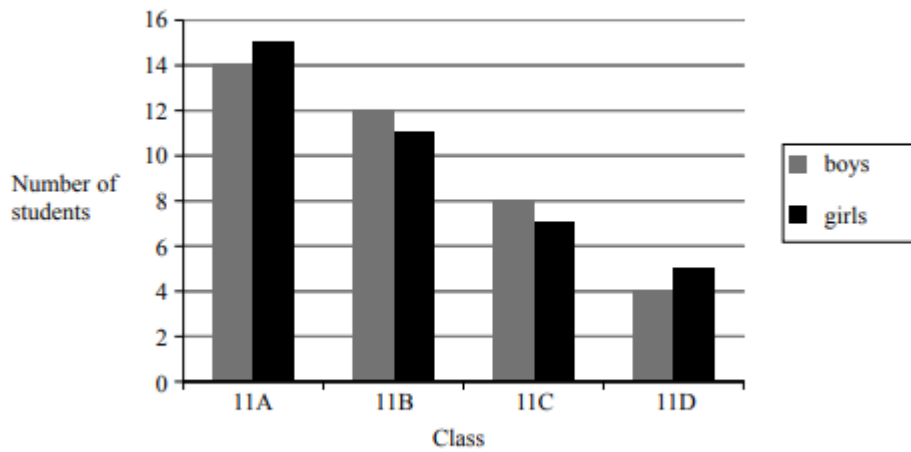
Work out the number of employees who cycle to work and the number of employees who walk to work.

(b) cycle
walk [3]

Pearson Edexcel – Sample Papers - Paper 3 (Calculator) Foundation Tier

11.

- 6 The bar chart gives information about the numbers of students in the four Year 11 classes at Trowton School.



- (a) What fraction of the students in class 11A are girls?

.....
(2)

Shola says,

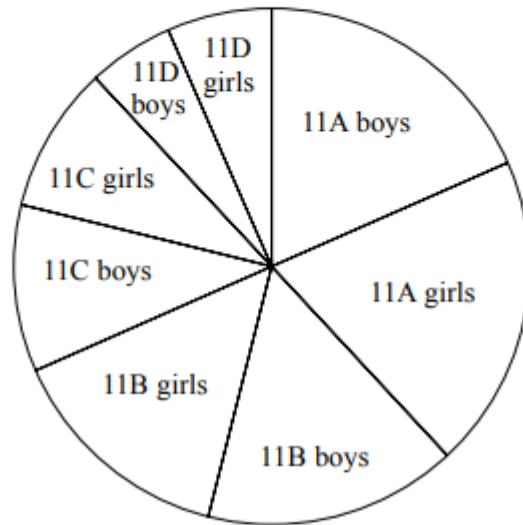
“There are more boys than girls in Year 11 in Trowton School.”

- (b) Is Shola correct?
You must give a reason for your answer.

.....
.....
(2)

The pie chart gives information about the 76 students in the same four Year 11 classes at Trowton School.

Number of students in Year 11 of Trowton School



Tolu says,

“It is more difficult to find out the numbers of students in each class from the pie chart than from the bar chart.”

(c) Is Tolu correct?

You must give a reason for your answer.

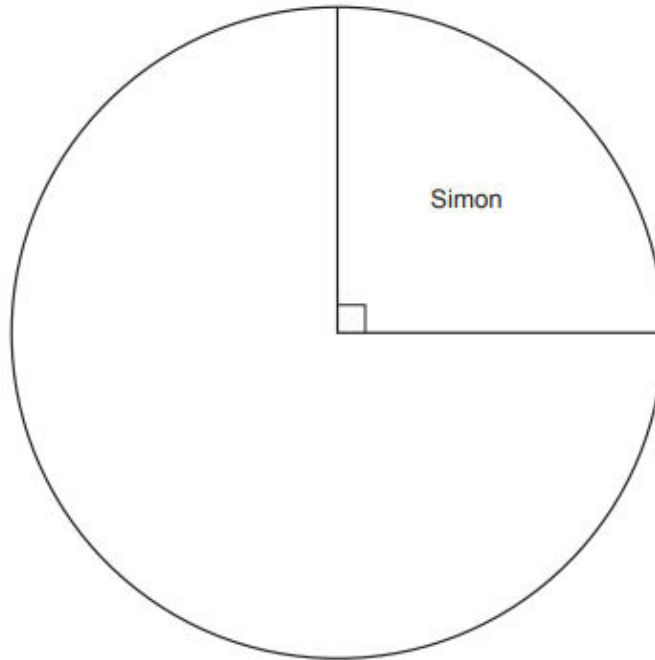
(1)

(Total for Question 6 is 5 marks)

OCR Thursday 25 May 2017 – Morning (Calculator) Foundation Tier

12.

- 9 Jorge recorded the scorers of 120 goals.
He started to draw a pie chart to show the results.



- (a) How many goals did Simon score?

(a) [1]

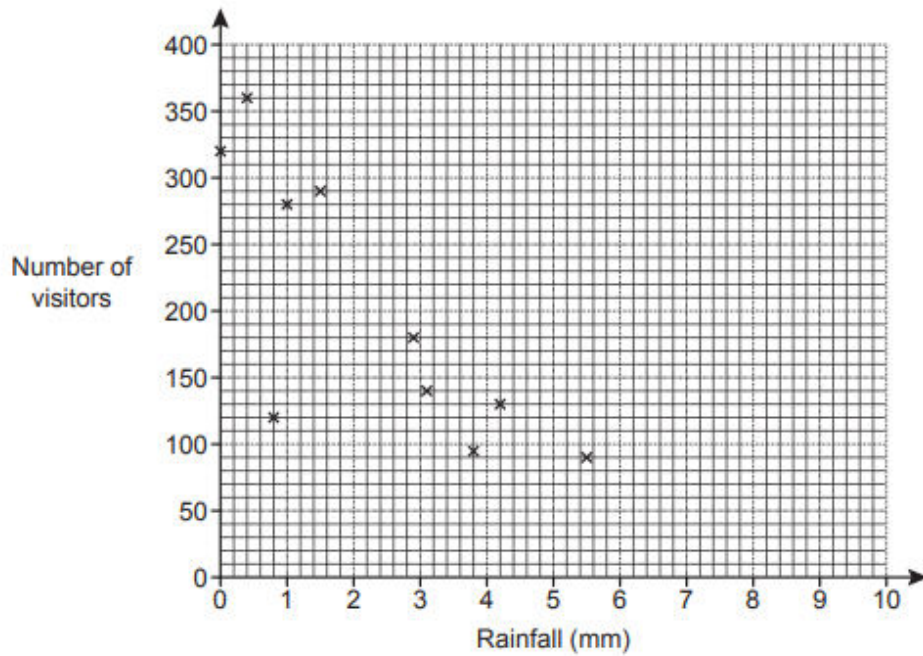
- (b) The table shows the **other** players who scored goals.

Name of scorer	Number of goals	Angle of sector
Wayne	48	144°
Harry	5	
Obi		72°
Antony		

- (i) Complete the table. [3]
(ii) Complete the pie chart. [2]

13.

- 16 (a) The owner of a tourist attraction records the amount of rainfall, in millimetres, and the number of visitors each day.
The results for 10 days are shown in the scatter diagram.



- (i) Circle the outlier on the scatter diagram. [1]

- (ii) The owner claims that he would expect around 320 visitors on a day with 2 mm of rainfall.

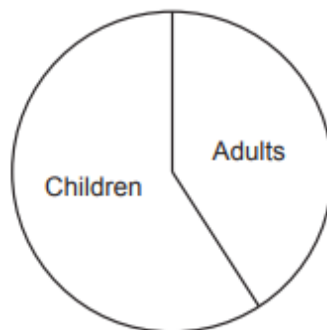
Does the scatter diagram support his statement?
Explain how you made your decision.

.....
..... [2]

- (iii) Explain why the scatter diagram should not be used to estimate the number of visitors on a day with 9 mm of rainfall.

.....
..... [1]

- (b) The pie chart summarises information about the visitors to the tourist attraction on a different day.



Explain why the pie chart cannot be used to work out how many adults visited on that day.

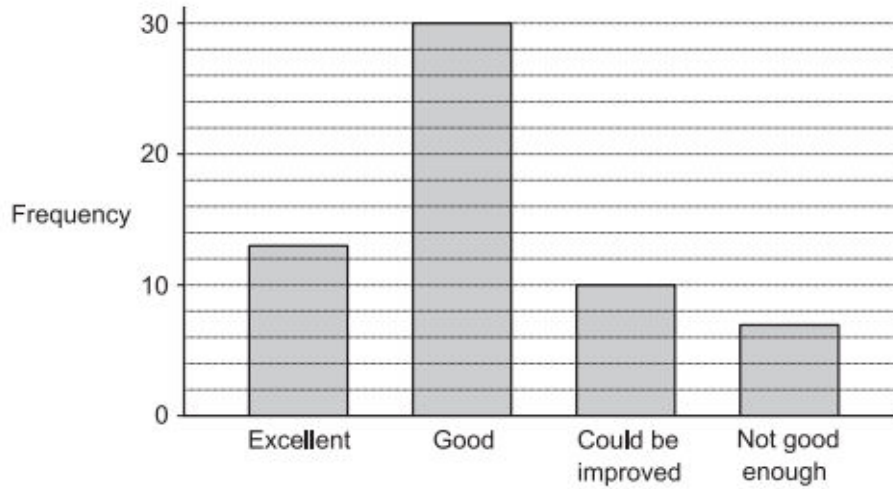
.....

..... [1]

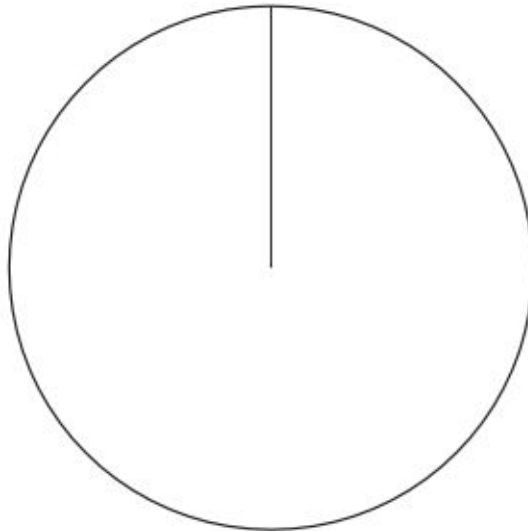
OCR Sample Question Paper 3 – Morning/Afternoon (Calculator) Foundation Tier

14.

- 2 Cambury Council asked 60 customers what they thought of the local leisure centre. The results are shown in this bar chart.



Draw and label a pie chart to represent this data.

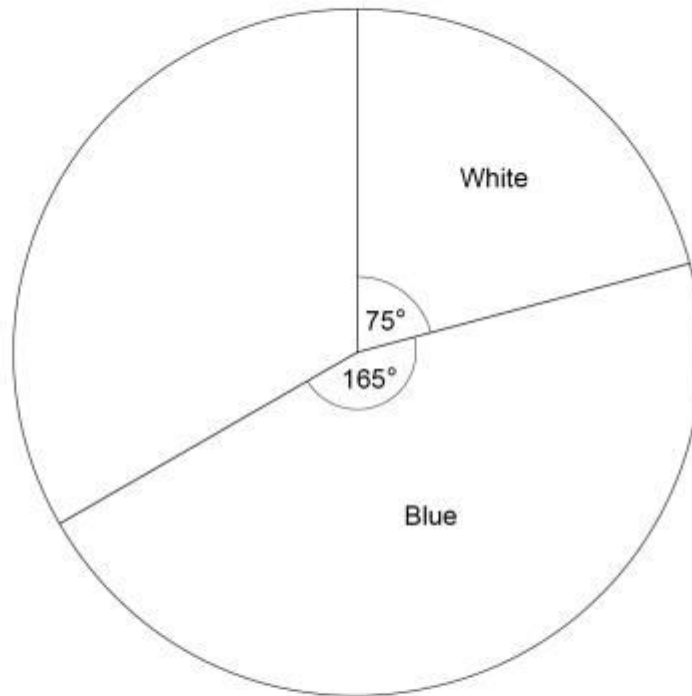


[5]

AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

15.

- 12 Some players were asked the shirt colour of their football team.
Each answer was either White, Blue, Red or Green.
A pie chart is drawn to represent the answers.
Two of the sectors are shown.



- 12 (a) The number who answered Red is three times the number who answered Green.
Complete the pie chart.

[3 marks]

12 (b) There were 600 players altogether.

How many players answered White?

[2 marks]

Answer _____

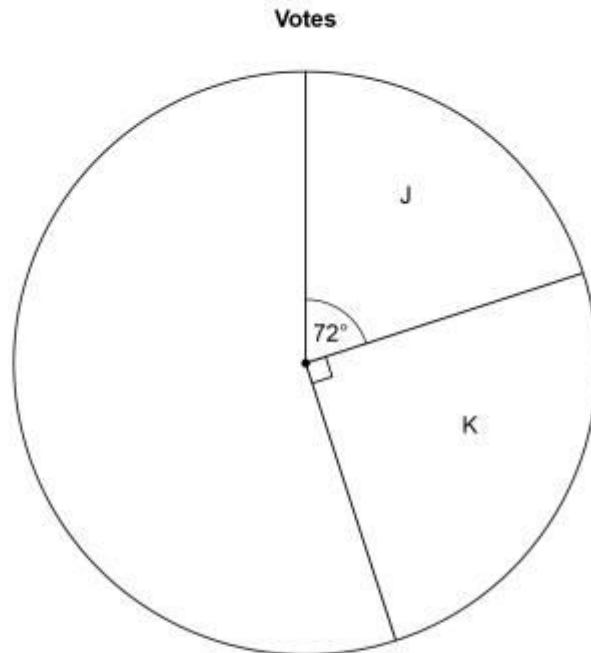
AQA Tuesday 12 June 2018 – Morning (Calculator) Foundation Tier

16.

19 In an election there were four candidates, J, K, L and M.

Fran is drawing a pie chart to show the results.

The sectors for J and K have been drawn.



19 (a) Twice as many people voted for L as voted for M.

Complete the pie chart.

[3 marks]

19 (b) Altogether, 16 200 people voted.

How many voted for J?

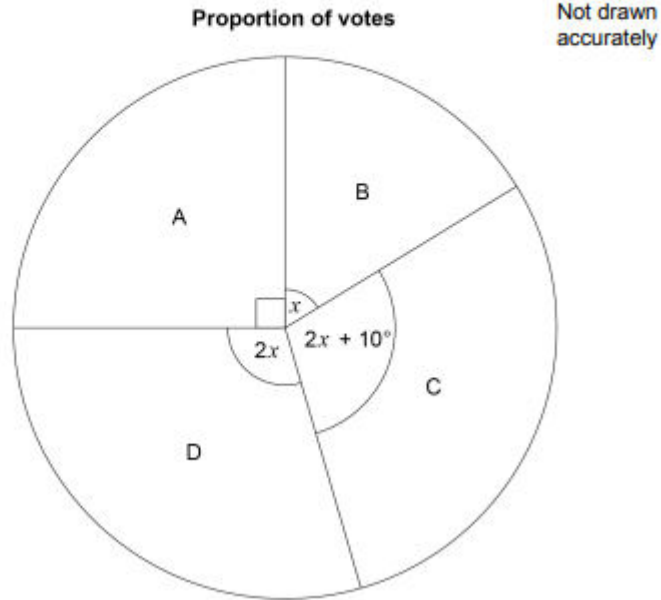
[2 marks]

Answer _____

AQA Thursday 2 November 2017 – Morning (Non-Calculator) Foundation Tier

17.

- 30 The four candidates in an election were A, B, C and D.
The pie chart shows the proportion of votes for each candidate.



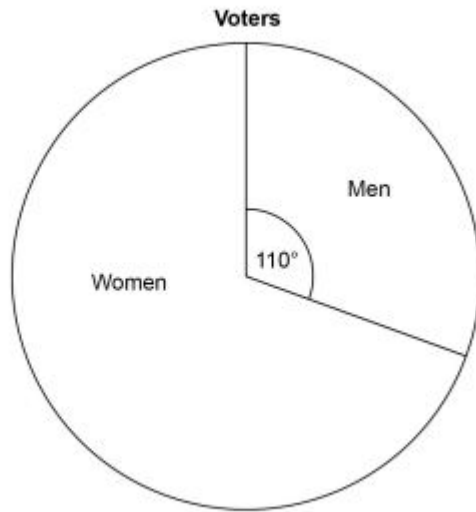
Work out the probability that a person who voted, chosen at random, voted for C. **[4 marks]**

Answer _____

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

18.

24 The pie chart shows information about voters in an election.



3360 **more** women voted than men.

Work out the total number of voters.

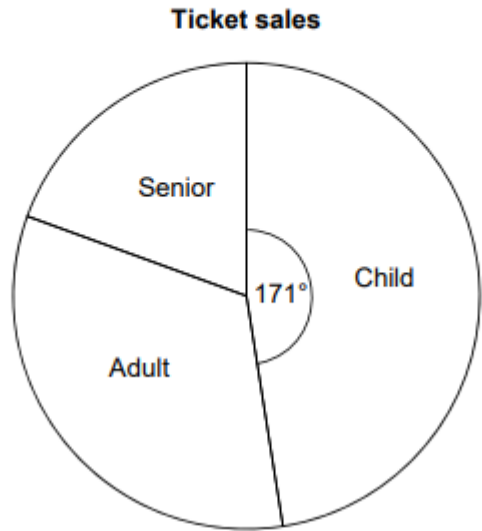
[3 marks]

Answer _____

AQA Sample Paper 2– Morning (Calculator) Foundation Tier

19.

- 12** The pie chart shows information about the sales of 800 tickets.
There were twice as many adult ticket sales as senior ticket sales.



- 12 (a)** Show that there were 140 senior ticket sales.

[3 marks]

12 (b) Draw a bar chart on the grid to represent the child, adult and senior ticket sales. **[4 marks]**

Ticket sales

