

- 1 Hugo records the number of pairs of trainers sold in each of four shoe shops last Saturday. He is going to draw a pie chart for his results.

The incomplete table shows two of Hugo's results and the sizes of three of the angles in his pie chart.

Name of shop	Number of pairs of trainers	Angle in pie chart
ABC Shoes	.....	$30^\circ$
Kilian Stuart Sports	18	$45^\circ$
One Stop Shoes	48	..... $^\circ$
Superfast Trainers	.....	$165^\circ$

Complete the table.

(Total for Question 1 is 4 marks)

- 2 Salma asked some people what type of exercise they each liked the best from walking or running or swimming or cycling.

Salma is going to draw a pie chart for her results.

The incomplete table gives some information about her results.

Type of exercise	Number of people	Angle in pie chart
Walking	18	$90^\circ$
Running		$150^\circ$
Swimming		
Cycling	15	

18 people answered walking.

- (a) How many people answered running?

.....  
(2)

15 people answered cycling.

- (b) How many people answered swimming?

.....  
(3)

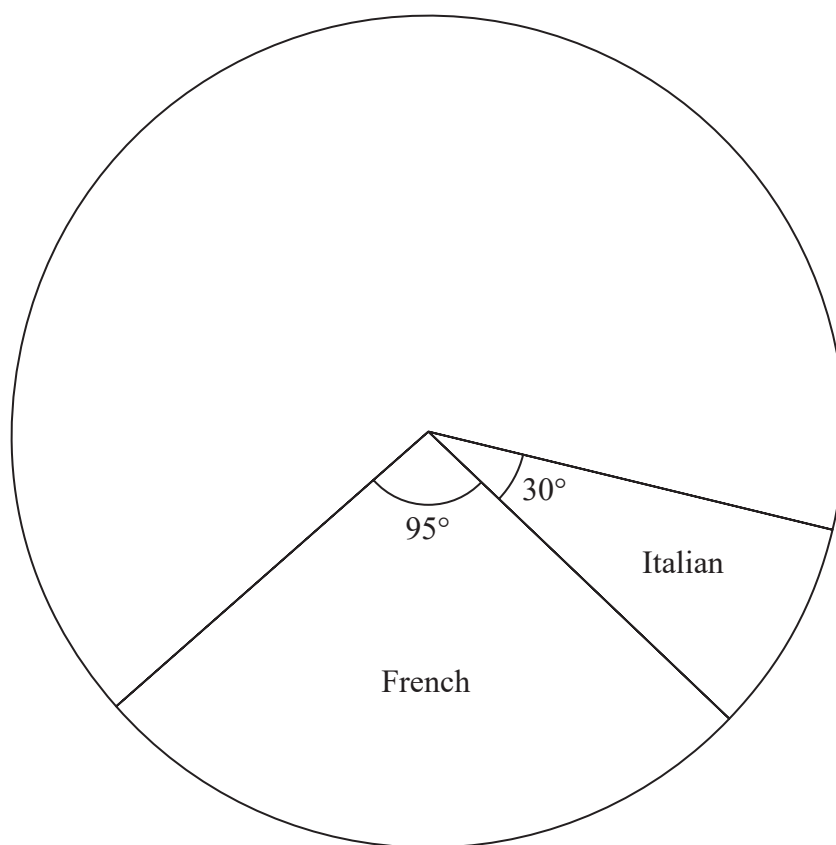
(Total for Question 2 is 5 marks)

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- 3 Some students leaving a language school one day were each asked which language lesson they had just attended.

The table and the pie chart give some information about their answers.

Language	Frequency	Angle in pie chart
Italian	24	$30^\circ$
French		$95^\circ$
Arabic	48	
English		
Spanish	80	



(a) Work out the number of students who answered French.

.....  
(2)

(b) Complete (i) the table and (ii) the pie chart.

(3)

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**(Total for Question 3 is 5 marks)**

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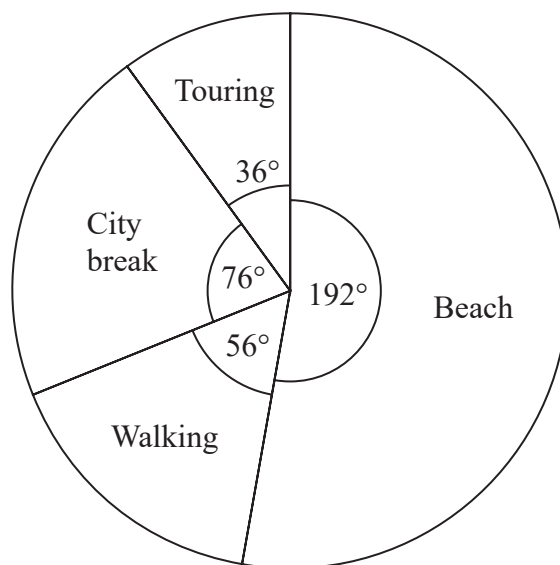
- 4 Kwo asked 40 people where they went on holiday last year.  
He is going to draw a pie chart for his results.

16 of the 40 people said they went to Egypt.

- (a) Work out the size of the angle in the pie chart for Egypt.

.....  
(2)

Tiffany asked some people what type of holiday they each like the best.  
She used her results to draw this pie chart.



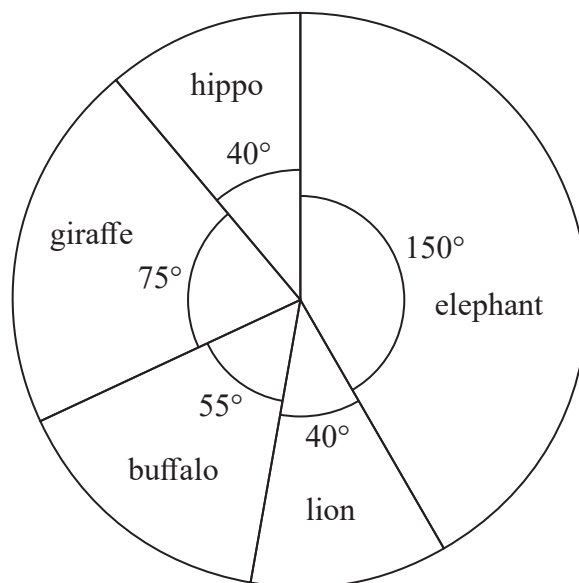
48 of the people that Tiffany asked said they like beach holidays the best.

- (b) Work out how many of the people Tiffany asked said they like walking holidays the best.

.....  
(2)

(Total for Question 4 is 4 marks)

- 5 Jerry went on holiday to a game reserve.  
He recorded the number of each of five different types of animal he saw.  
The pie chart below gives information about his results.



- (a) Write down the ratio of the number of elephants Jerry saw to the number of giraffes he saw.  
Give your ratio in its simplest form.

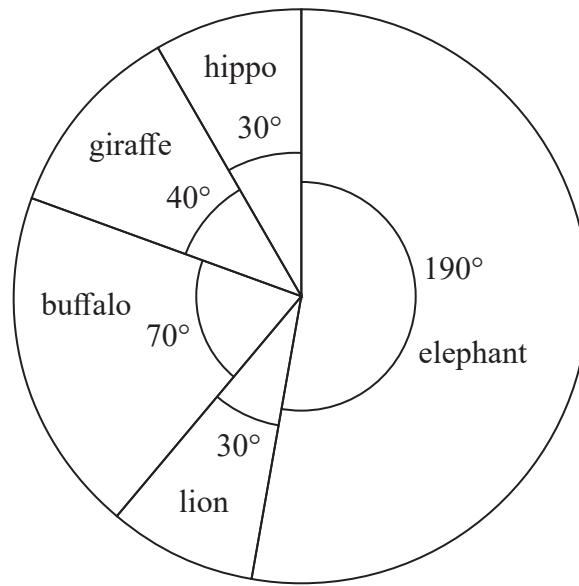
(2)

Jerry saw 8 lions.

- (b) How many giraffes did Jerry see?

(2)

Lesley went on holiday to the same game reserve.  
She also recorded the number of each of five different types of animal she saw.  
The pie chart below gives information about her results.



Lesley says,

“The pie charts show that I saw more elephants than Jerry saw.”

(c) Is Lesley correct?

You must give a reason for your answer.

(1)

(Total for Question 5 is 5 marks)

- 6 There are 120 cyclists in a cycling club.  
 There are 67 professional cyclists and the rest are amateur cyclists.  
 Each of these cyclists was asked to name their favourite type of bike.

The two-way table shows some information about their answers.

	Road bike	Mountain bike	Hybrid bike	Total
Professional	26			67
Amateur		32		
Total	39	54		120

- (a) Complete the table.

(3)

- (b) Work out the percentage of the cyclists who answered Mountain bike.

.....%  
 (2)

Jacob is going to draw a pie chart for the age groups of the 120 cyclists.  
 There are 41 people in the ‘over 60’ age group.

- (c) Work out the size of the angle for the sector representing the ‘over 60’ age group.

.....°  
 (2)

(Total for Question 6 is 7 marks)



- 7 Paolo has a bag of flour.  
The flour in the bag has a weight of 3 kilograms.

Paolo makes 8 pies using the flour in the bag.

3 of the pies each need 150 grams of the flour.

5 of the pies each need 180 grams of the flour.

Work out the weight of flour that remains in the bag when Paolo has made these pies.  
Give your answer in grams.

..... grams

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**(Total for Question 7 is 3 marks)**

**8** Anjali, Ravina and Sandeep were the three candidates in an election.

Heidi draws a pie chart for the number of votes received by each of the three candidates.

The angle in the pie chart for the number of votes received by Anjali is  $90^\circ$

The angle in the pie chart for the number of votes received by Ravina is  $160^\circ$

Ravina received 400 votes.

Work out the number of votes Sandeep received.

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**(Total for Question 8 is 3 marks)**

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- 9 Last Thursday, 135 students each bought one item of fruit.  
The table shows information about the 135 items of fruit they bought.

Fruit	apple	pear	orange	banana	peach
Number of students	36	15	27	33	24

One of the 135 students is chosen at random.

- (a) Find the probability that this student bought an apple or a banana.

.....  
(2)

A pie chart is drawn for the information in the table.

- (b) Work out the size of the angle in the pie chart for oranges.

.....  
(2)

(Total for Question 9 is 4 marks)

**10** Cate asked the 60 members of a leisure centre how many times they had each visited the leisure centre last week.

The table gives information about her results.

Number of visits	Frequency
0	4
1	12
2	17
3	20
4	7

(a) Write down the mode of the number of visits.

.....  
(1)

Cate is going to draw a pie chart for the information in the table.

(b) Work out the size of the angle in the pie chart for the sector representing 1 visit.

.....  
(2)

35% of the 60 members are aged 50 or over.

(c) Work out how many of the members are aged 50 or over.

.....  
(2)

(Total for Question 10 is 5 marks)