

## Questions

Q1.

The pie chart shows information about the use of water by people in a village in Zambia on one day.

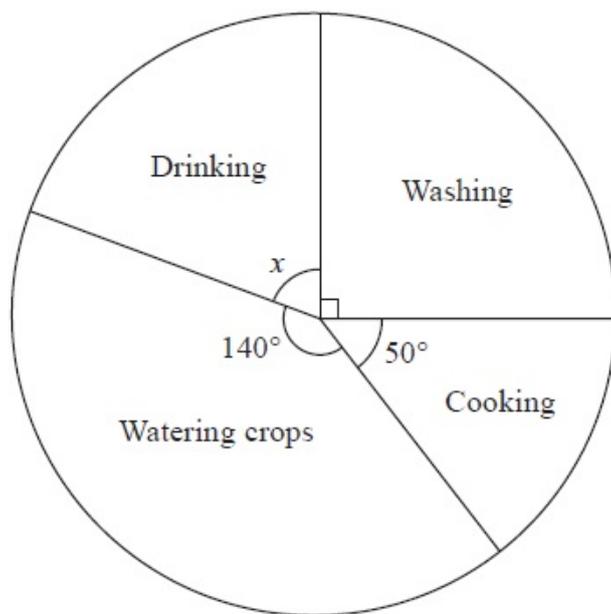


Diagram NOT  
accurately drawn

(a) (i) Calculate the size of angle  $x$ .

..... °

(ii) Explain how you found your answer.

.....

(2)

(b) 90 litres of water were used for cooking.  
How many litres were used for watering crops?

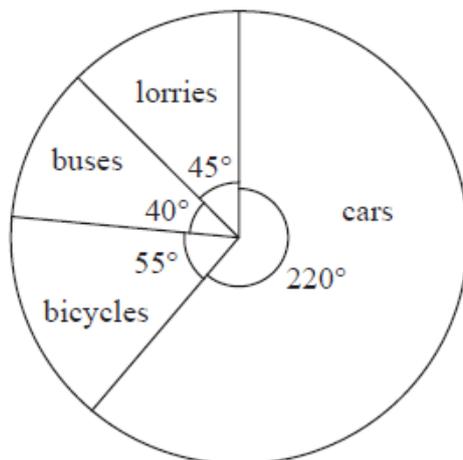
..... litres

(3)

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

Q2.

The pie chart shows information about the types of vehicles that went past a school, in one hour, on Monday morning.



(a) 16 buses went past the school.

Work out the number of bicycles that went past the school.

.....

(2)

(b) The table shows the numbers of vehicles that went past the school, in one hour, on Tuesday morning.

| Vehicles     | Frequency |
|--------------|-----------|
| Cars         | 41        |
| Bicycles     | 15        |
| Buses        | 7         |
| Lorries      | 9         |
| <b>Total</b> | <b>72</b> |

A pie chart is to be drawn to show this information.

Work out the size of the angle in the pie chart for the 9 lorries.

..... °

(2)

**(Total for Question is 4 marks)**

Q3.

Michael carried out a survey.

He asked some students what they thought was the most important benefit of reading.

The pie chart shows some information about their responses.

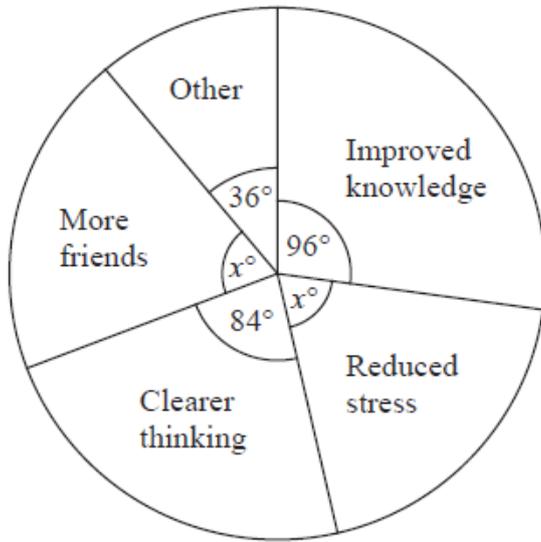


Diagram NOT accurately drawn

(a) What fraction of the students gave Reduced stress as their response?

.....

(2)

The number of students who gave Improved knowledge as their response was 48

(b) Work out how many students were in the survey.

.....

(2)

**(Total for Question is 4 marks)**

Q4.

The pie chart gives information about the amounts spent by a gas company in one year.

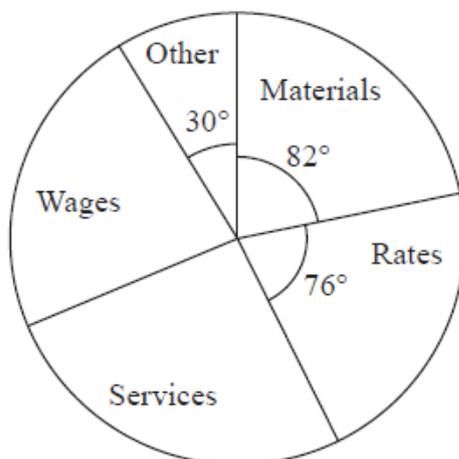


Diagram NOT accurately drawn

The amount spent on materials was 225.5 million euros.

The amount spent on services was the same as the amount spent on wages.

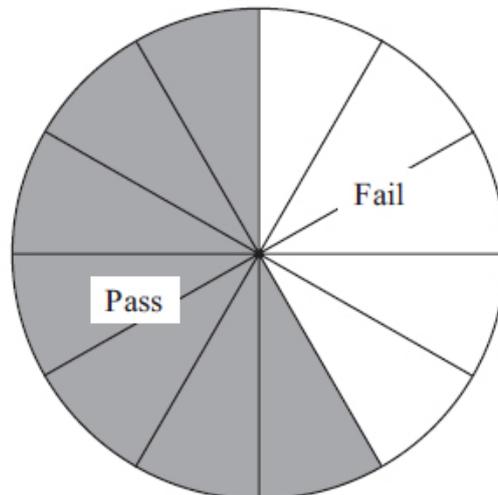
Work out the amount spent on services.

..... million euros

**(Total for question = 3 marks)**

Q5.

Some people took a driving test.  
The pie chart shows information about their results.  
The pie chart is accurately drawn.



20 drivers failed the test.  
How many drivers passed the test?

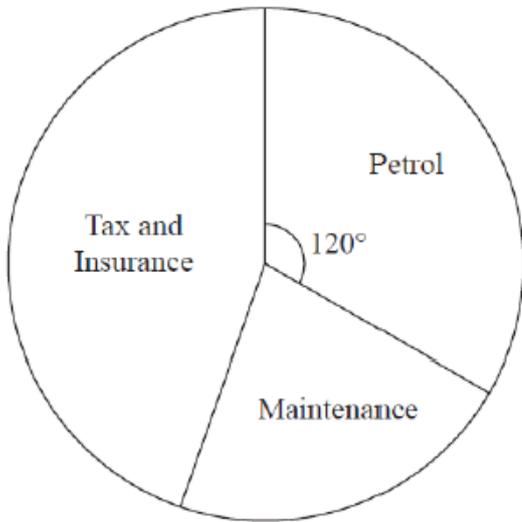
.....

**(Total for question = 2 marks)**

Q6.

(a) The pie chart shows information about the amounts Mrs Gupta spent in one year to run her car.

She spent a total of £1800.



Work out how much Mrs Gupta spent on petrol for her car in the year.

£.....

(2)

(b) The table shows the cost of the electricity, used by the Gupta family, for each 3-month period in one year.

| Months             | Cost of electricity (£) |
|--------------------|-------------------------|
| January – March    | 300                     |
| April – June       | 140                     |
| July – September   | 100                     |
| October – December | 260                     |
| <b>Total</b>       | <b>800</b>              |

Rohit Gupta must draw a pie chart for this information for his maths homework.

Work out the angle in the pie chart for the 3-month period from July to September.

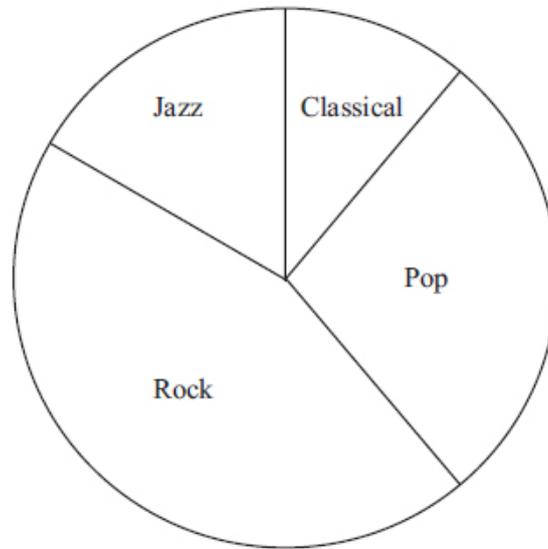
..... °

(2)

**(Total for question = 4 marks)**

Q7.

First year students at a college chose their favourite type of music. The pie chart shows information about their choices. The pie chart is accurately drawn.



(a) 18 students chose Classical

Work out the number of students who chose Jazz.

.....

(3)

(b) Another pie chart is to be drawn for second year students. There are 150 second year students. 60 of these students chose Rock.

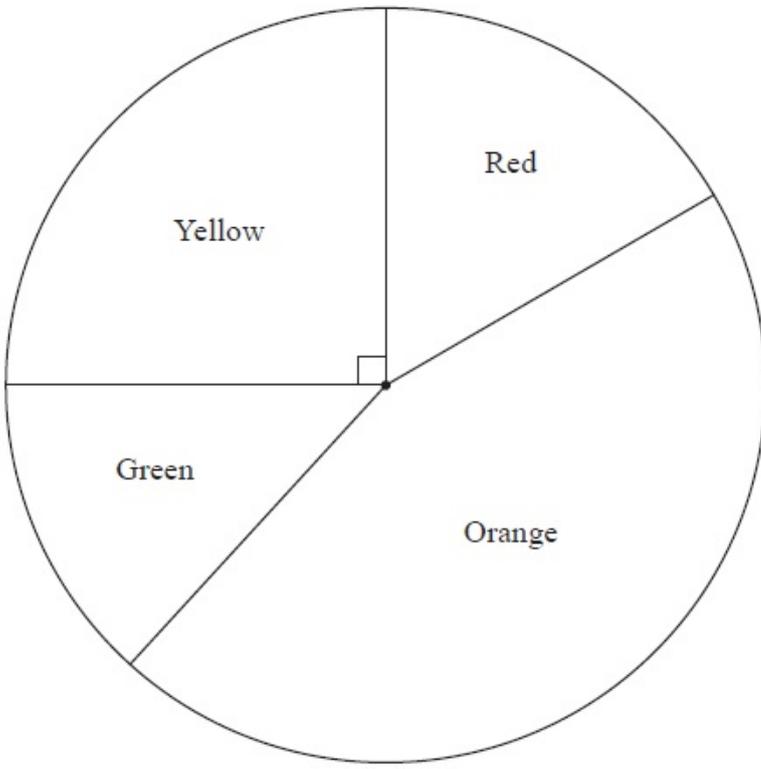
Calculate the angle in the pie chart for these 60 second year students who chose Rock

..... °

(2)

**(Total for question is 5 marks)**

Q8.



A jar contains 60 sweets.

The sweets are red or orange or green or yellow.

The number of sweets of each colour in the jar was used to draw the pie chart.

The pie chart is accurately drawn.

(a) Which colour sweet is there most of in the jar?

.....  
(1)

(b) Measure the size of the angle on the pie chart for green sweets.

..... °  
(1)

The angle on the pie chart for yellow sweets is  $90^\circ$

(c) How many of the 60 sweets in the jar are yellow?

.....  
(2)

10 of the 60 sweets in the jar are red.

Billy takes at random a sweet from the jar.

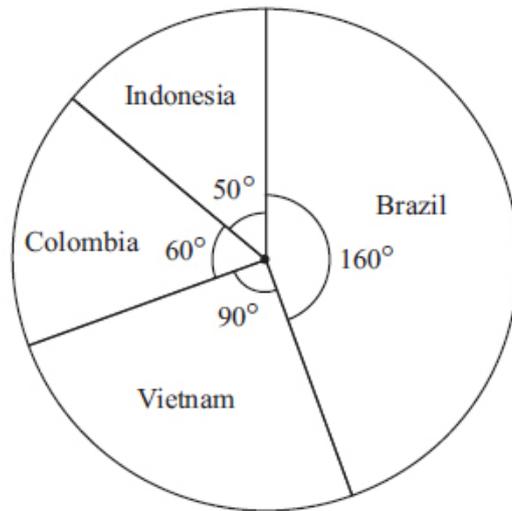
(d) What is the probability that he takes a red sweet?

.....

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

Q9.

The pie chart shows information about the amount of coffee produced in four countries, in one year.



(a) (i) Write down the ratio of the amount of coffee produced in Colombia to the amount of coffee produced in Vietnam.  
Give your answer in its simplest form.

.....

(ii) In this year, Indonesia produced 0.7 million tonnes of coffee.  
Work out how much coffee Brazil produced.

..... million tonnes

**(5)**

(b) A second pie chart is to be drawn for tea production.  
4 million tonnes of tea was produced in one year.  
China produced 1.2 million tonnes of tea in this year.

Calculate the size of the angle for China in this second pie chart.

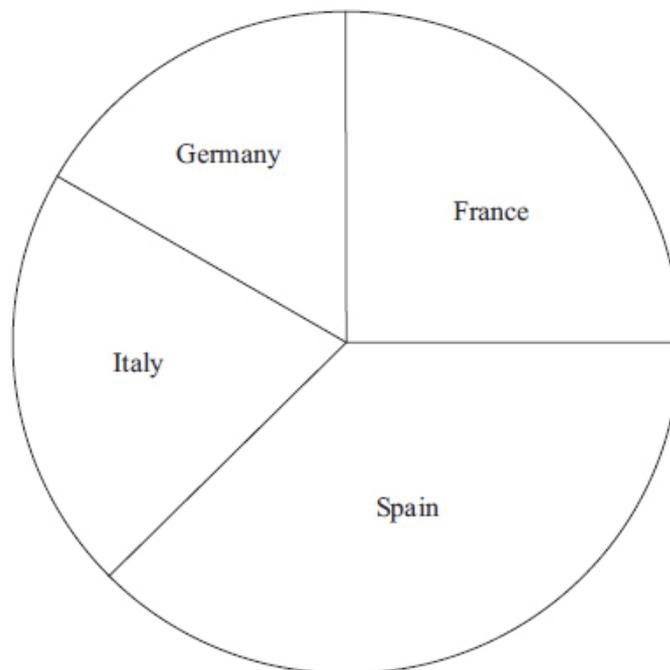
.....°

**(2)**

**(Total for question = 7 marks)**

Q10.

In a survey, some students named the country in which they took their last holiday. The pie chart shows information about the results. The pie chart is accurately drawn.



42 students took their last holiday in France.

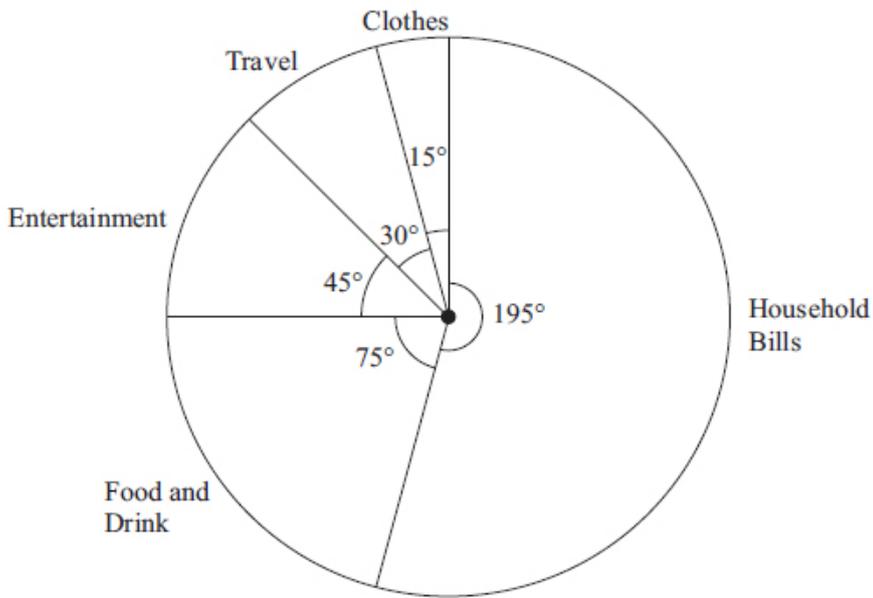
Work out the number of students who took their last holiday in Spain.

.....

**(Total for question = 3 marks)**

Q11.

The pie chart shows information about Andrew's spending last month. The pie chart is accurately drawn.



(a) Andrew spent \$80 on travel last month.  
Work out the amount Andrew spent on household bills last month.

\$.....

(3)

(b) A second pie chart is to be drawn for Cathy's spending.  
Cathy spent a total of \$800 last month.  
She spent \$120 on entertainment last month.

Calculate the size of the angle for entertainment in the second pie chart.

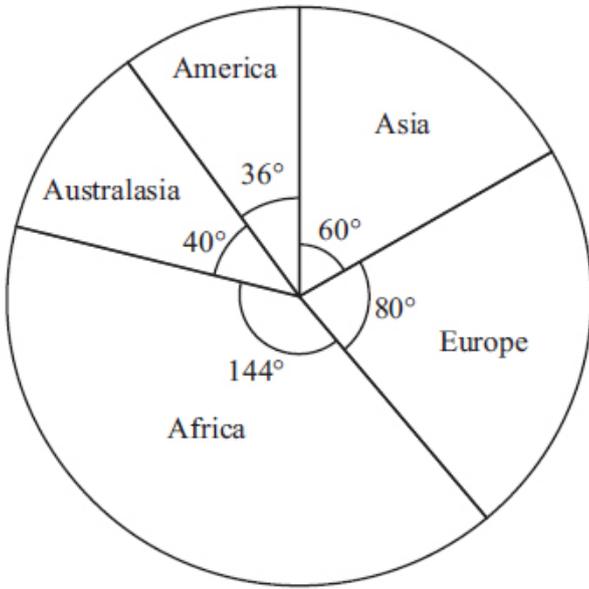
..... $^\circ$

(2)

**(Total for question = 5 marks)**

Q12.

The students in an international school were asked, "In which continent were you born?"  
Their answers were used to draw this pie chart.



(a) 90 students were born in Asia.  
 Put your text for the second indented line here. Work out the number of students who were born in Europe.

.....  
 (2)

(b) The headteacher of the school chooses at random one of the students.  
 Find the probability that this student was born in Africa.

.....  
 (2)

**(Total for question = 4 marks)**