1 The bar chart shows information about the number of visitors to China from each of four countries in 2015
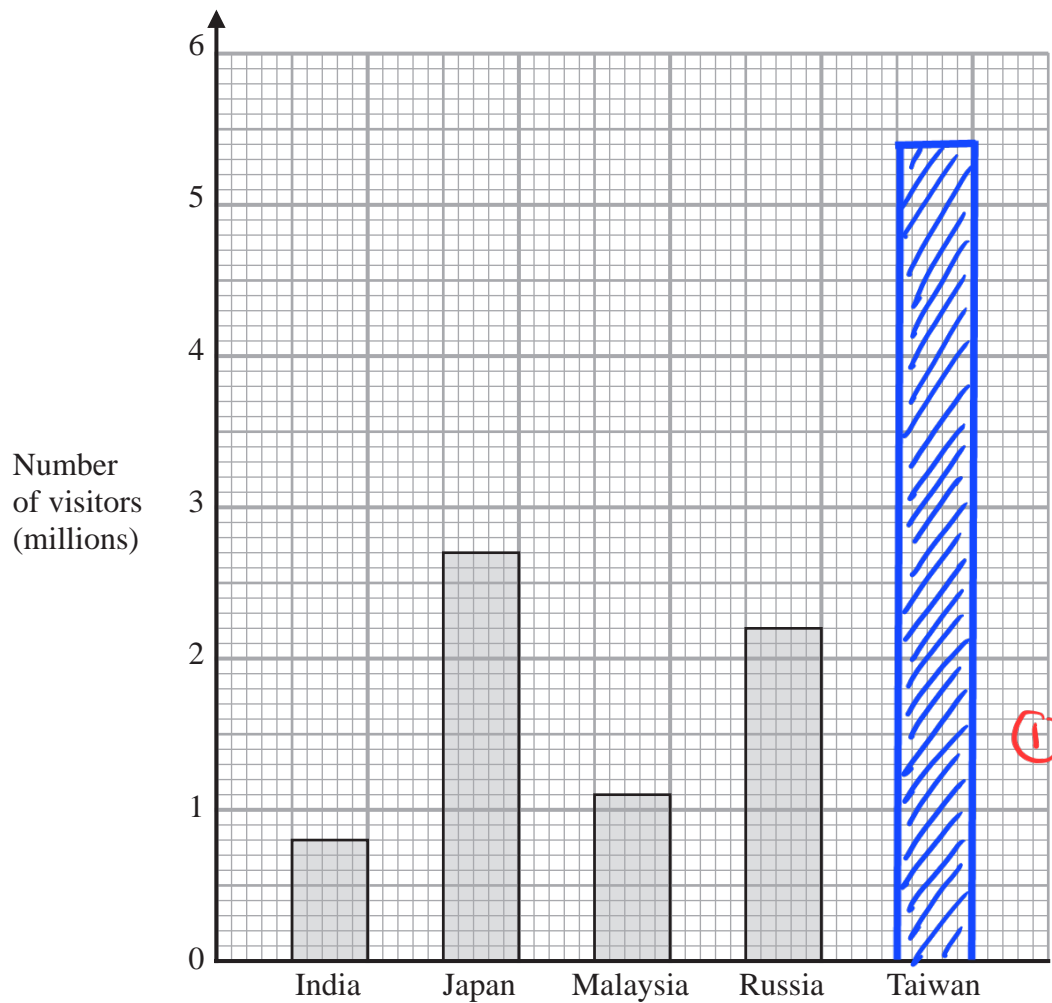

(a) Write down the number of visitors from Japan.

2·7 ① .... million

(1)

(b) From which country were there 1.1 million visitors?

Malaysia ①

....

(1)

The number of visitors from Taiwan was 5.4 million.

(c) Draw a bar on the bar chart to show this information.

(1)

The number of visitors from one country was twice the number of visitors from Malaysia.

(d) Write down the name of this country.

1·1 x 2 = 2·2 million

Russia has 2·2 million visitors·

Russia ①

....

(1)

(Total for Question 1 is 4 marks)

2 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	12	30°
Kilian Stuart Sports	18	45°
One Stop Shoes	48	120 ① °
Superfast Trainers	66	165°

Complete the table.

Angle in pie chart (One stop shoes) = 360° − 165° − 45° − 30°
= 120° ①

ABC shoes = $\frac{30°}{45°}$ × 18 = 12 ①

Superfast Trainers = $\frac{165°}{120°}$ × 48 = 66 ①

(Total for Question 2 is 4 marks)

3 The bar chart shows information about the weight, in millions of tonnes, of bananas produced by each of four countries in 2016
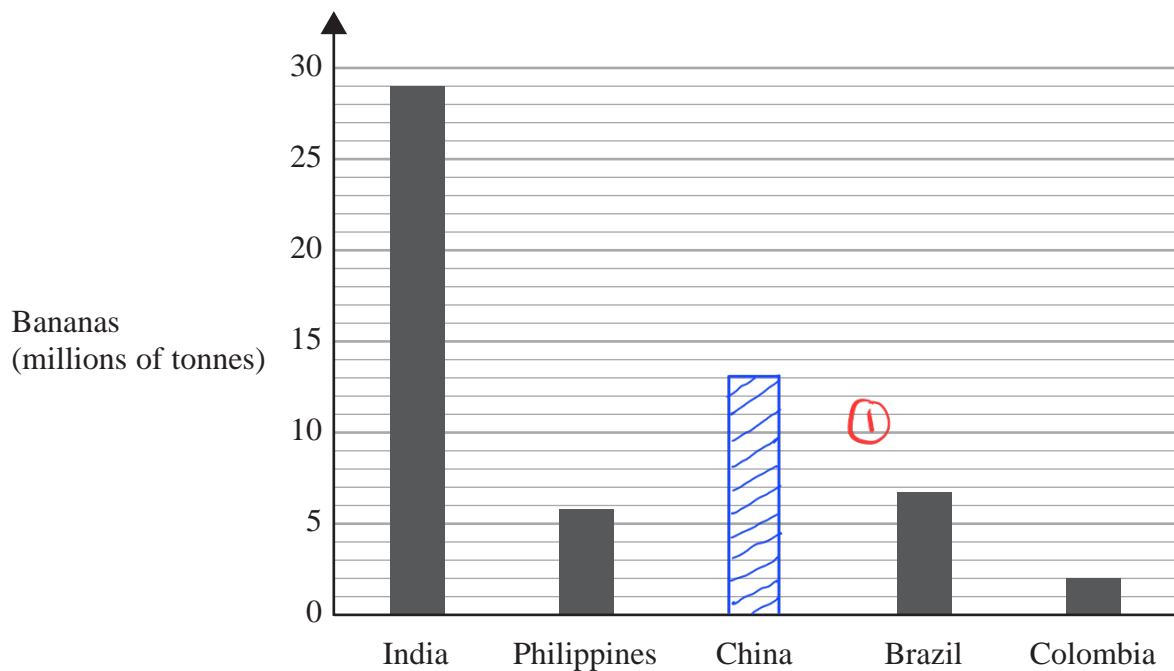
In 2016, China produced 13 million tonnes of bananas.

(a) Draw a bar on the bar chart to show this information.

(1)

One of these countries produced 6.8 million tonnes of bananas in 2016

(b) Which country?

Brazil ①

....

(1)

In 2016, a total of 113 million tonnes of bananas was produced worldwide.

(c) What fraction of the 113 million tonnes of bananas was produced in India in 2016?

India : 29 million tonnes ①

$\dfrac{29}{113}$ ①

$\dfrac{29}{113}$

....

(2)

(Total for Question 3 is 4 marks)

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.

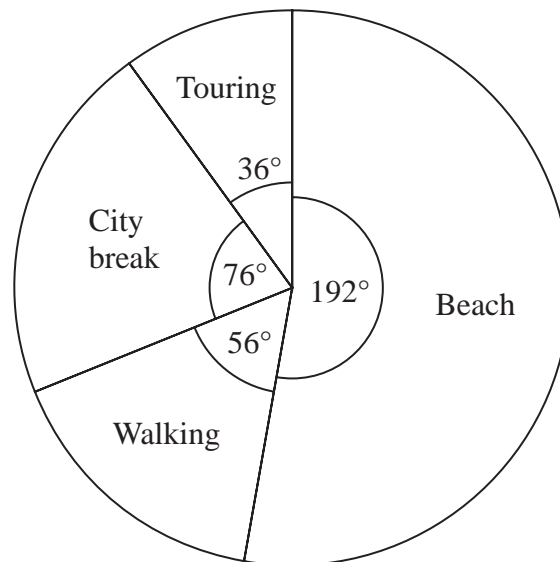(a) Work out the size of the angle in the pie chart for Egypt.

total angle in a pie chart

$$\frac{16}{40} \times 360° = 144° \; ①$$
①

144 °
....

(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.

$$\frac{192}{360} = 48 \text{ people} \qquad \frac{56}{360} = x \text{ people}$$

$$\frac{x}{48} = \frac{56}{192}$$

14
....

(2)

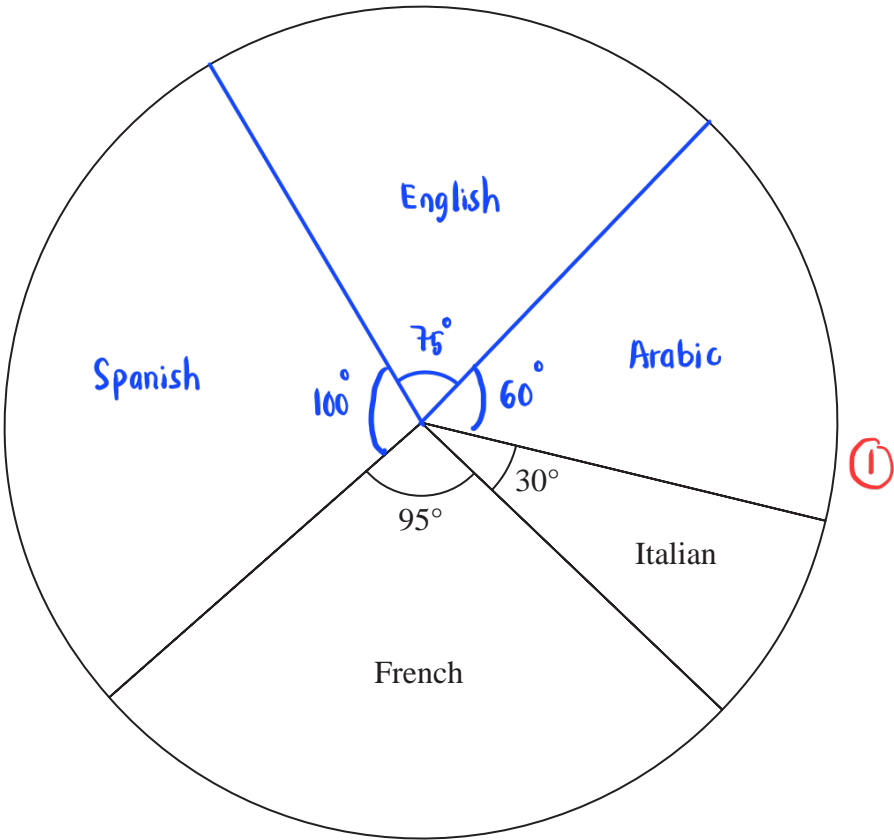$$x = \frac{56}{192} \times 48 \; ① = 14 \; ①$$

(Total for Question 4 is 4 marks)

5 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°
French	76 ①	95°
Arabic	48	60°
English	60	75° ①
Spanish	80	100°

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

Finding total number of students:

$\dfrac{30}{360} \times N = 24$

$N = 24 \times \dfrac{360}{30}$

$= 288$ ①

French: $\dfrac{95}{360} \times 288$

$= 76$ ①

76

(2)

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

(3)

English $= 288 - 80 - 48 - 76 - 24$

$= 60$

$\angle$ Arabic $= \dfrac{x}{360} \times 288 = 48$

$x = 60°$

$\angle$ Spanish $= \dfrac{z}{360} \times 288 = 80$

$z = 100°$

$\angle$ English $= \dfrac{y}{360} \times 288 = 60$

$y = 75°$

(Total for Question 5 is 5 marks)

6 On Friday, Sophie received 14 emails, on Saturday she received 11 emails and
on Sunday she received 6 emails.

(e) Draw a bar chart to show the number of emails Sophie received on each of Friday,
Saturday and Sunday.
Complete the frequency axis.

(2)
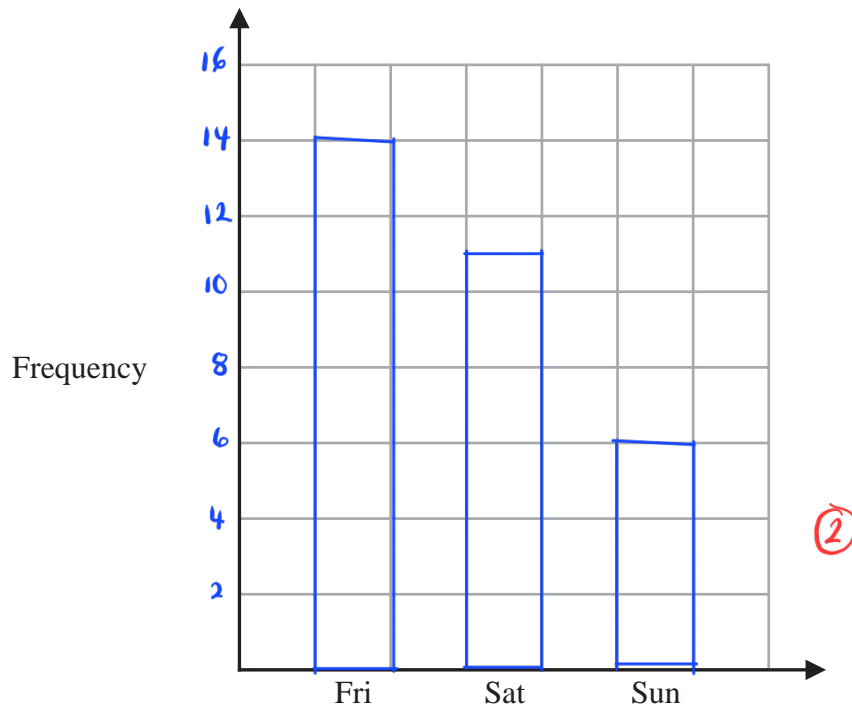
(Total for Question 6 is 2 marks)

7 The students in class 7T were asked how they got to school one day.

Here is a list of their method of travel to school.

walk	bus	bicycle	walk	bus
bicycle	walk	car	bus	bicycle
bus	bicycle	bus	car	walk
walk	bus	walk	walk	car

(a) Complete the frequency table for the methods of travel in the list.

Method of travel	Tally	Frequency
walk	ЦНГ ‖	7
bus	ЦНТ ∣	6
bicycle	‖‖	4
car	‖∣	3

②

(2)

(b) Draw a bar chart for the information in your table.

③

(3)

(Total for Question 7 is 5 marks)

8 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°
Running	30	150°
Swimming		45°
Cycling	15	75°

18 people answered walking.

(a) How many people answered running?

$$\text{Running} = \frac{150°}{90°} \times 18 \; ①$$

$$= 30 \; ①$$

.... 30

(2)

15 people answered cycling.

(b) How many people answered swimming?

Angles in pie chart of cycling:

$$\theta = \frac{15}{30} \times 150° = 75°$$

Angles in pie chart of swimming:

$$360° - 90° - 150° - 75° = 45° \; ①$$
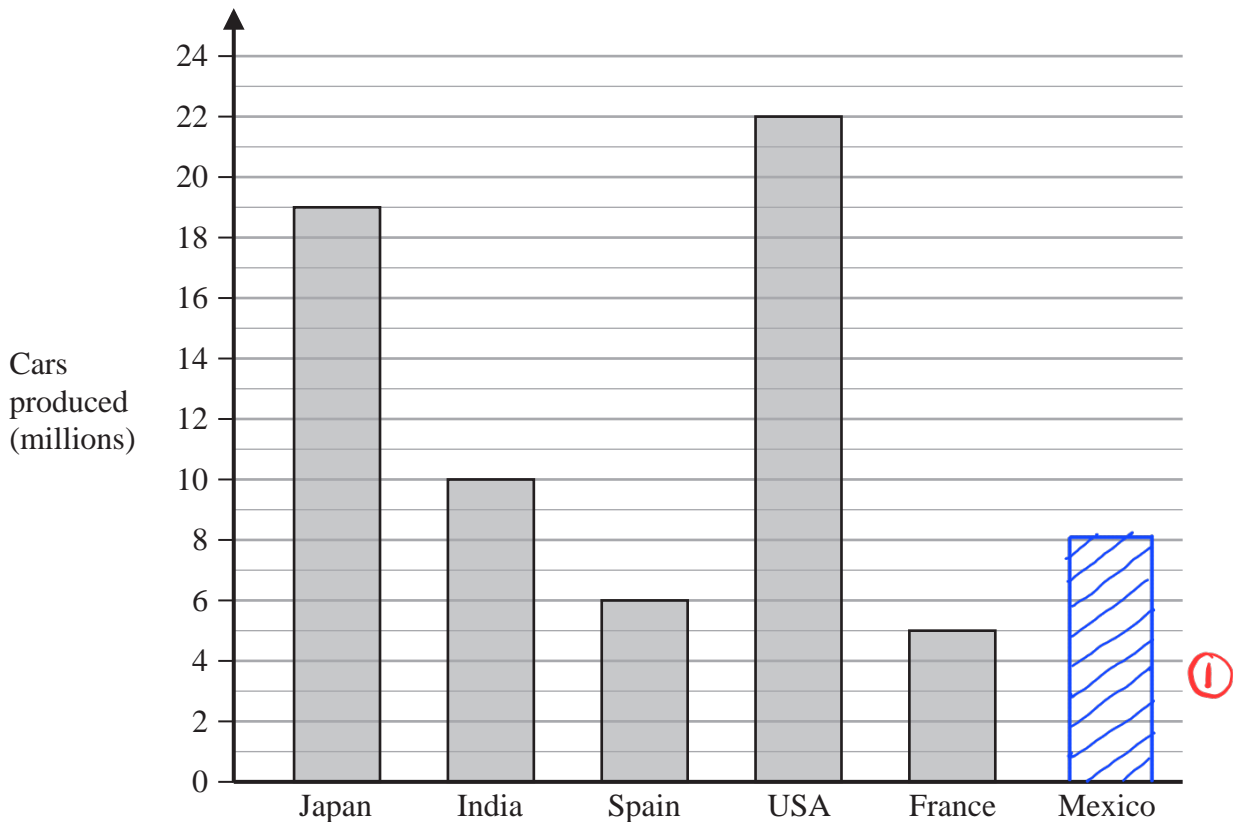
.... 9

(3)

$$\text{Swimming}: \frac{45°}{90°} \times 18° = 9 \; ① \; ①$$

(Total for Question 8 is 5 marks)

9 The bar chart gives information about the total number, in millions, of cars produced in 2017 and 2018 for each of five countries.

The total number of cars produced in 2017 and 2018 in Mexico was 8 million.

(a) Draw a bar on the bar chart to show this information.

(1)

(b) Which of these six countries produced the greatest total number of cars?

USA ①

....

(1)

(c) Which country produced half as many cars as India?

$\frac{1}{2} \times 10 = 5$

France ①

....

(1)

(d) Work out the difference between the total number of cars produced in Japan and the total number of cars produced in Spain.

Japan = 19

Spain = 6

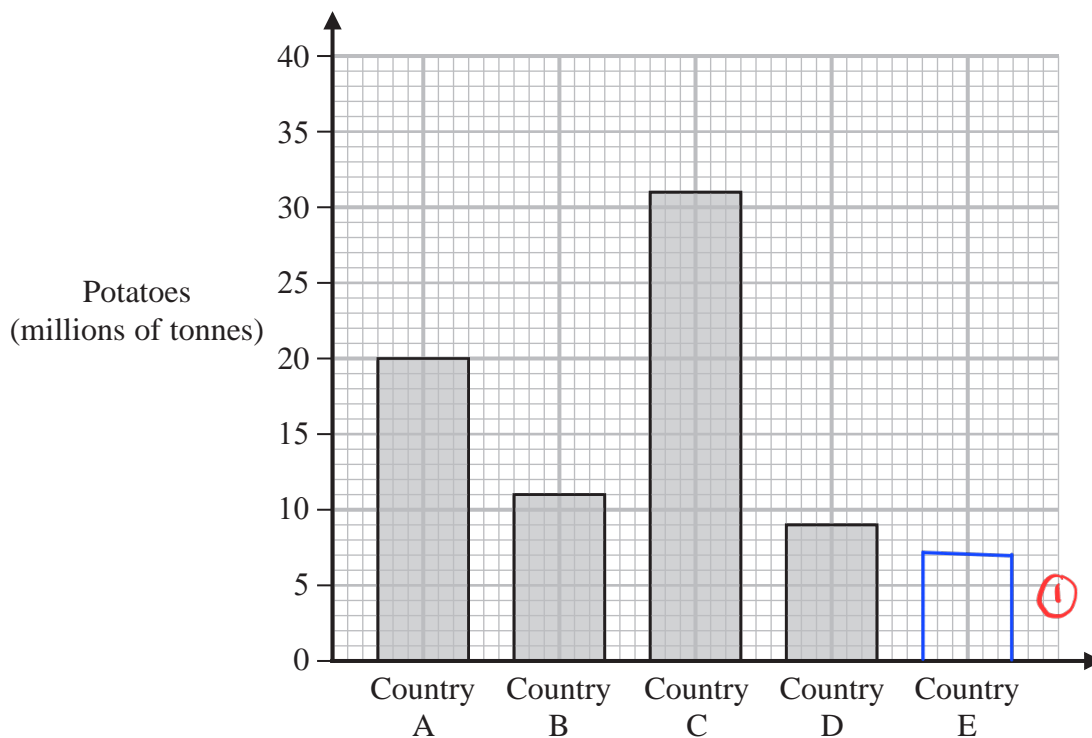19 − 6 = 13

13 ①

.... million

(1)

(Total for Question 9 is 4 marks)

10 The bar chart shows information about the weight, in millions of tonnes, of the potatoes produced by each of four countries in 2016

In 2016, one of these four countries produced 11 million tonnes of potatoes.

(a) Which country?

.... B ①

(1)

In 2016, Country E produced 7 million tonnes of potatoes.

(b) Draw a bar on the bar chart to show this information.

(1)

In 2016, the weight of potatoes produced by Country C was greater than the weight of potatoes produced by Country A.
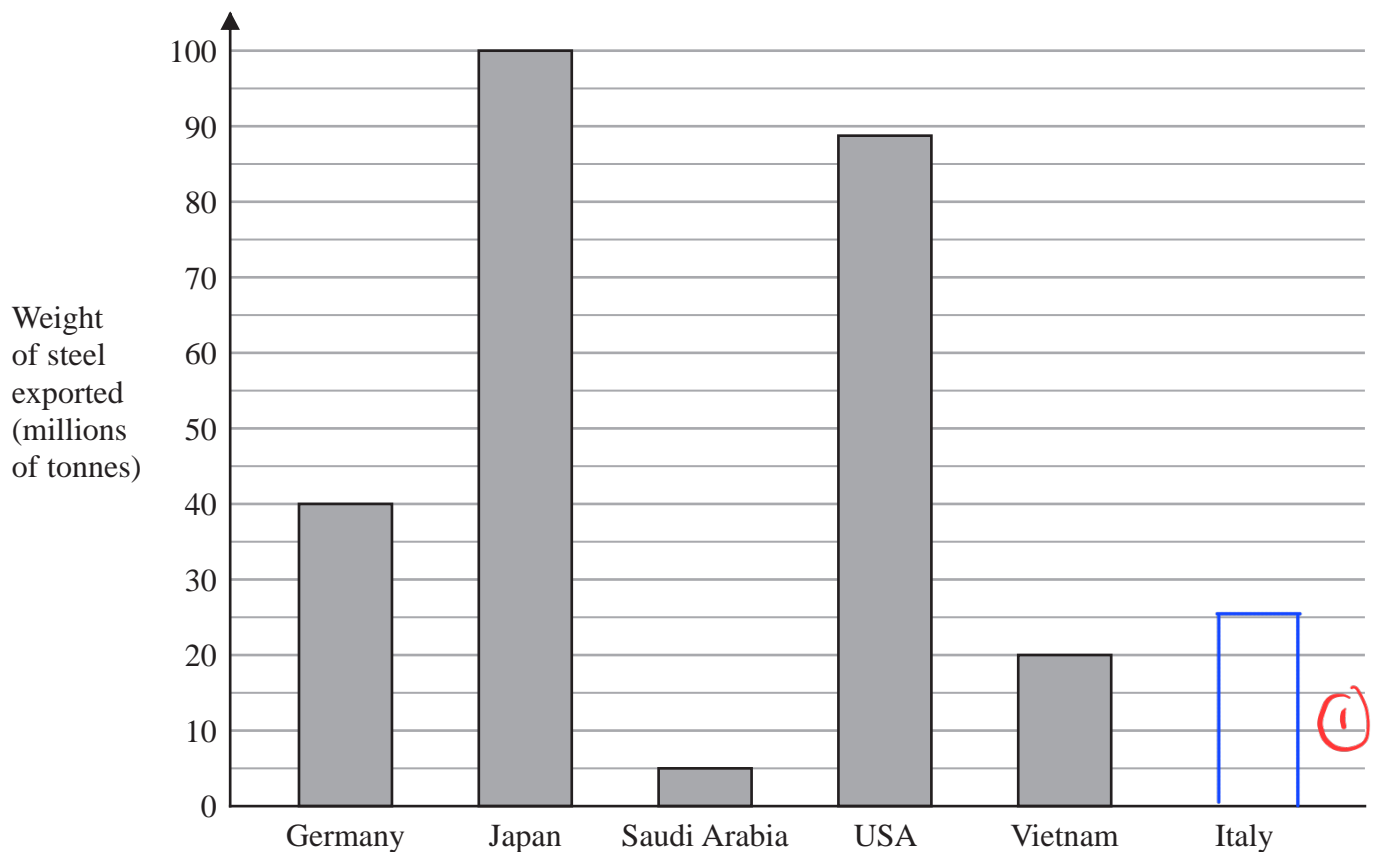
(c) How many million tonnes greater?

31 - 20 = 11

.... 11 ① million tonnes

(1)

(Total for Question 10 is 3 marks)

11 The bar chart shows information about the weight of steel, in millions of tonnes, exported by each of five countries in 2019

Using the information in the bar chart,

(a) write down the weight of steel exported by Germany,

.... 40 ① million tonnes

(1)

(b) write down the country that exported 88 million tonnes of steel,

USA ①

....

(1)

(c) work out the difference between the weight of steel exported by Japan and the weight of steel exported by Saudi Arabia.

$100 - 5 = 95$

.... 95 ① million tonnes

(1)

Italy exported 25 million tonnes of steel in 2019

(d) Draw a bar on the bar chart to show this information.

(1)

(Total for Question 11 is 4 marks)

12   Belinda asks 20 people to name the type of rice that they each like the best.

Here are her results.

arborio	jasmine	basmati	jasmine	basmati
basmati	arborio	wild	jasmine	jasmine
jasmine	jasmine	arborio	basmati	basmati
wild	basmati	jasmine	wild	arborio

(b) Complete the frequency table for Belinda's results.

Type of rice	Tally	Frequency
arborio	IIII	4
basmati	JHT I	6 ②
jasmine	JHT II	7
wild	III	3

(2)

(Total for Question 12 is 2 marks)

13   Tamzin recorded the colour of each of the cars she saw one afternoon.
She saw only red cars, blue cars, white cars and black cars.

The bar chart gives information about the numbers of red cars, blue cars and white cars that she saw.
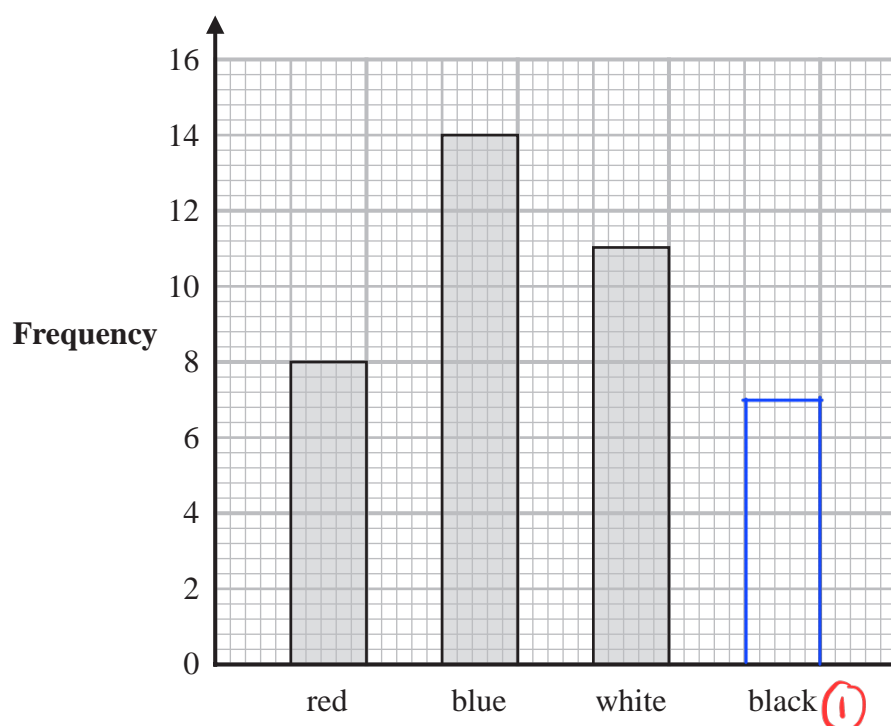
(a) Write down the number of red cars that Tamzin saw.

8

(1)

Tamzin saw 40 cars in total.

(b) Draw a bar on the bar chart to show the number of black cars that Tamzin saw.
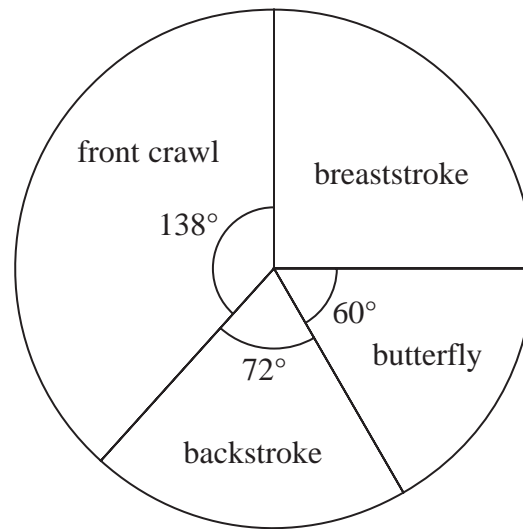
40 − 8 − 14 − 11 = 7

(3)

(Total for Question 13 is 4 marks)

14 Sayeeda asked the members of a swimming club which one of front crawl, breaststroke, backstroke or butterfly is their favourite stroke.

The pie chart shows some information about their answers.

12 members said backstroke.

(a) Work out the number of members who said front crawl.

Front crawl = $\dfrac{138}{72} \times 12$ = 23

23
....

(2)

(Total for Question 14 is 2 marks)

**15** Ivor asks 20 children in his class to name their favourite fruit.
Here are his results.

apple	orange	grape	peach	grape
banana	apple	orange	grape	peach
apple	apple	banana	peach	orange
grape	orange	apple	orange	orange

(a) Complete the frequency table to show this information.

Fruit	Tally	Frequency
apple	ЖП	5
banana	||	2
grape	||||	4
peach	|||	3
orange	ЖП	ⓘ	6 ⓘ

(2)

(b) Complete the bar chart for the information in your table.

(3)
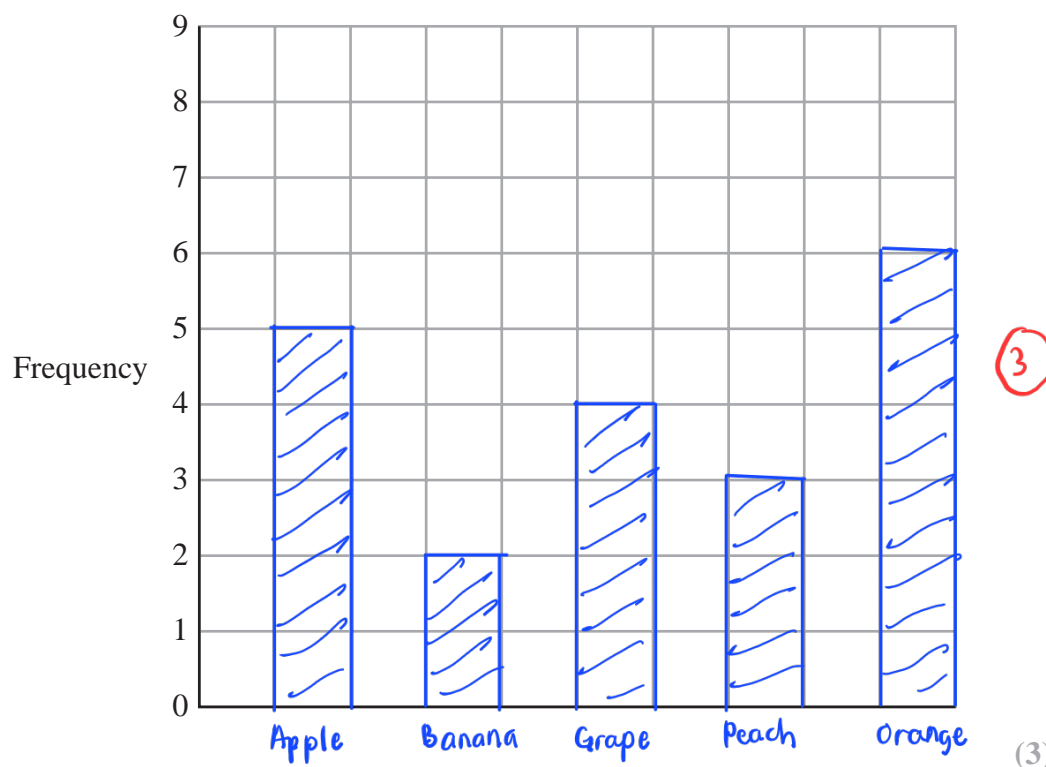
(Total for Question 15 is 5 marks)

16 Trisha asked 90 people to name their favourite type of cheese to put on a pizza.
She is going to draw a pie chart for her results.

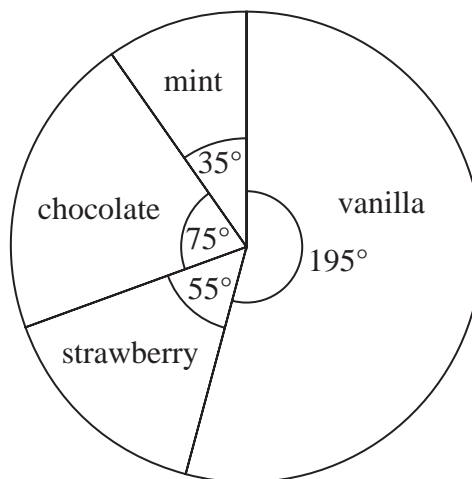55 of the 90 people said that mozzarella was their favourite.

(a) Work out the size of the angle on the pie chart for the sector
representing mozzarella.

$$\frac{55}{90} \times 360° = 220°$$

220 °

(2)

Haashir asked a different group of people to name their favourite ice cream flavour.
He used his results to draw this pie chart.

39 of the people Haashir asked said that vanilla was their favourite.

(b) Work out how many of the people Haashir asked said that chocolate was
their favourite.

$$39 \times \frac{75°}{195°} = 15$$

15

(2)

(Total for Question 16 is 4 marks)