Name:

Exam Style Questions

Bar Charts

Corbettmaths

Equipment needed: Ruler, pencil and pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Videos 147, 148

Answers and Video Solutions
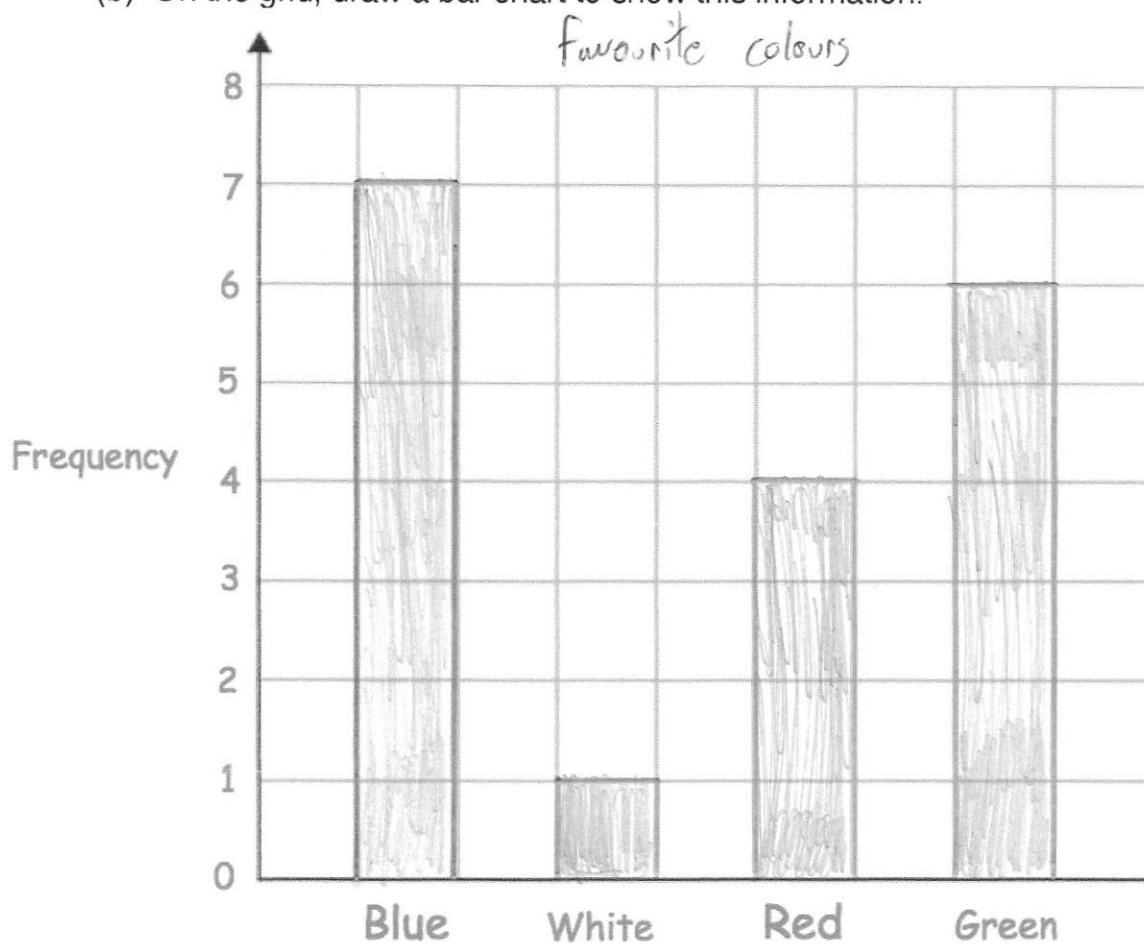
1. James asked his friends their favourite colour.

Green	Blue	Red	Green	Blue	Blue
Green	Red	Blue	White	Blue	Green
Red	Green	Blue	Red	Blue	Green

(a) Complete the frequency table for his results.

Colour	Tally	Frequency
Blue	IIII II	7
White	I	1
Red	IIII	4
Green	IIII I	6

(2)

(b) On the grid, draw a bar chart to show this information.

Favourite colours

(2)

2. A group of students were asked their favourite subject.

Here are their replies.

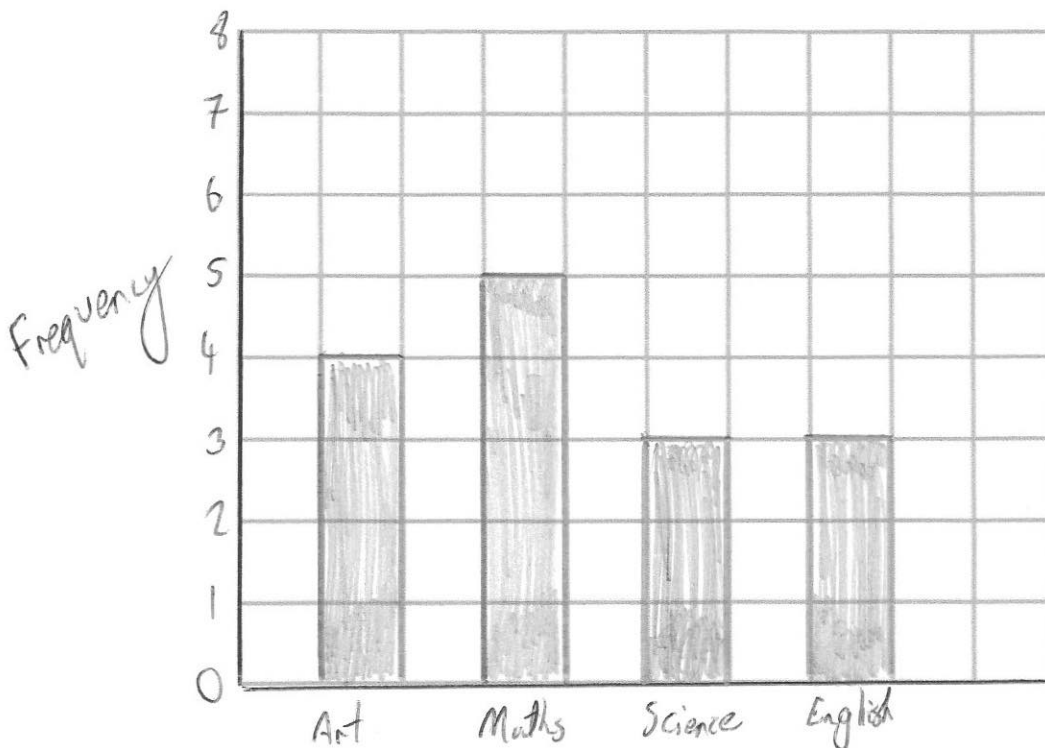| Maths | Art | Science | English | Art |
| Maths | English | Science | Art | English |
| Maths | Maths | Art | Maths | Science |

(a) Show this information in a tally chart.

Subject	tally	frequency
Art	IIII	4
Maths	HHt	5
Science	III	3
English	III	3

(2)

(b) Draw a bar chart to show this information.
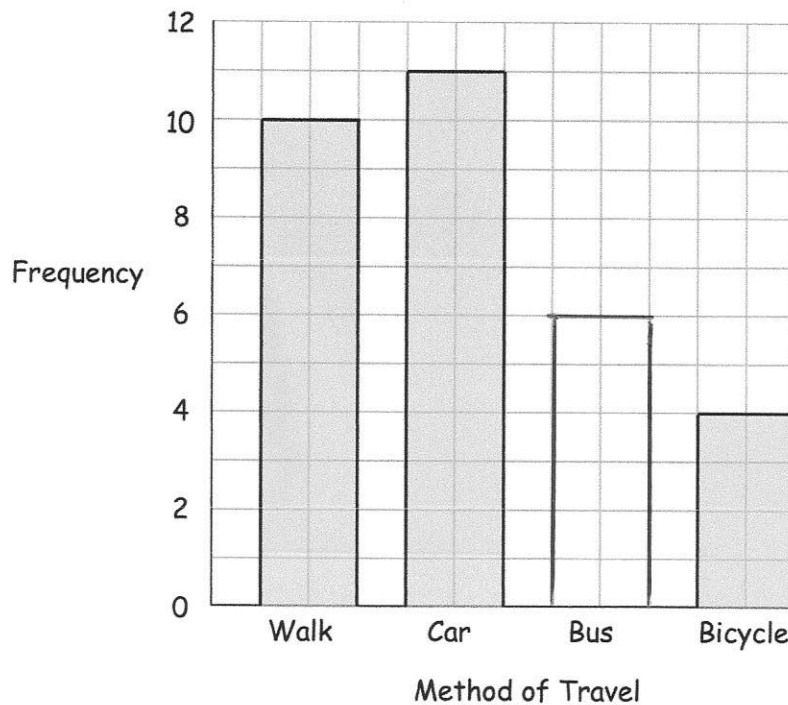
Bar chart to show favourite subject

(3)

3. A teacher asked her students how they travel to school.
The bar chart shows some of her results.

6 students travelled by bus.

(a) Complete the bar chart with this information.

(1)

(b) How many students walked to school?

10

(1)

Jemima says that twice as many students travelled to school by car than by bus.

Is she correct?
Explain your answer.

Car — 11 students
bus — 6 students

No, Twice as many students would be 12, but only 11 travel by car.

(1)

© Corbettmaths 2024

4. The shoe sizes of two classes are recorded.
One class is Year 6 and the other Year 7.
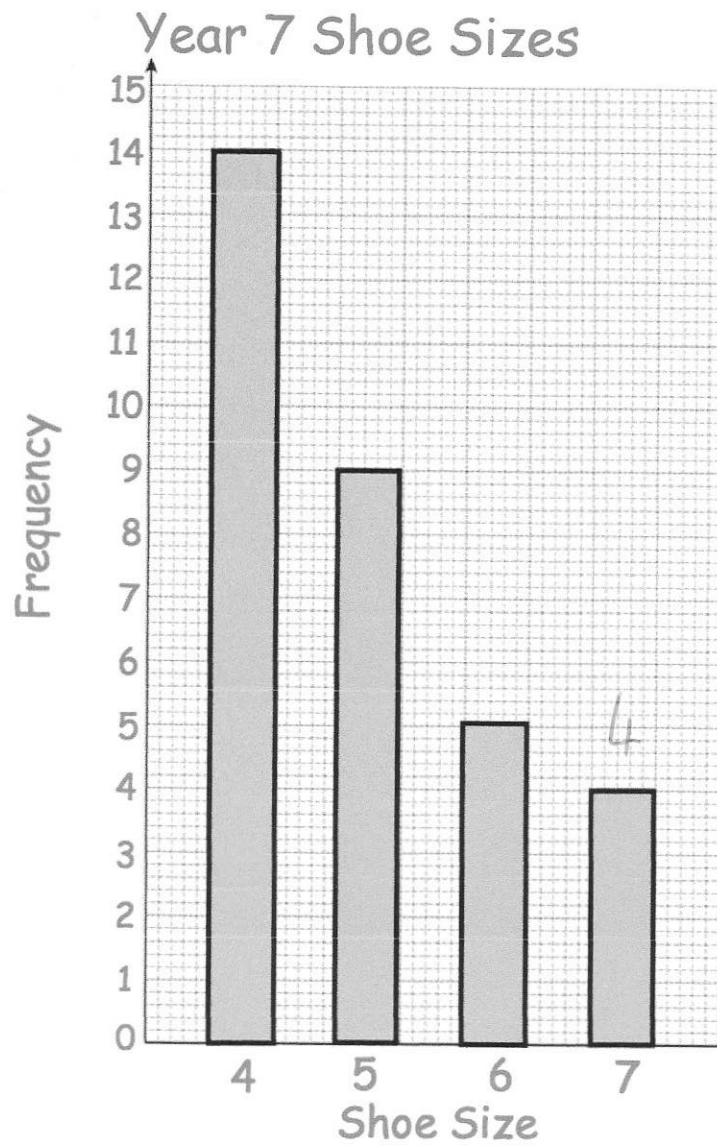
Here are the shoe size for the Year 6 class.

Shoe Size	Frequency
4	12
5	10
6	3
7	1

(a) Show these results on a bar chart.

Year 6 Shoe Sizes

Frequency

shoe size

(3)

Here are the shoe sizes for Year 7.

Year 7 Shoe Sizes

(b) How many Year 7's wear a size 5?

9

(1)

(c) How many more Year 7's than Year 6's wear a size 7?
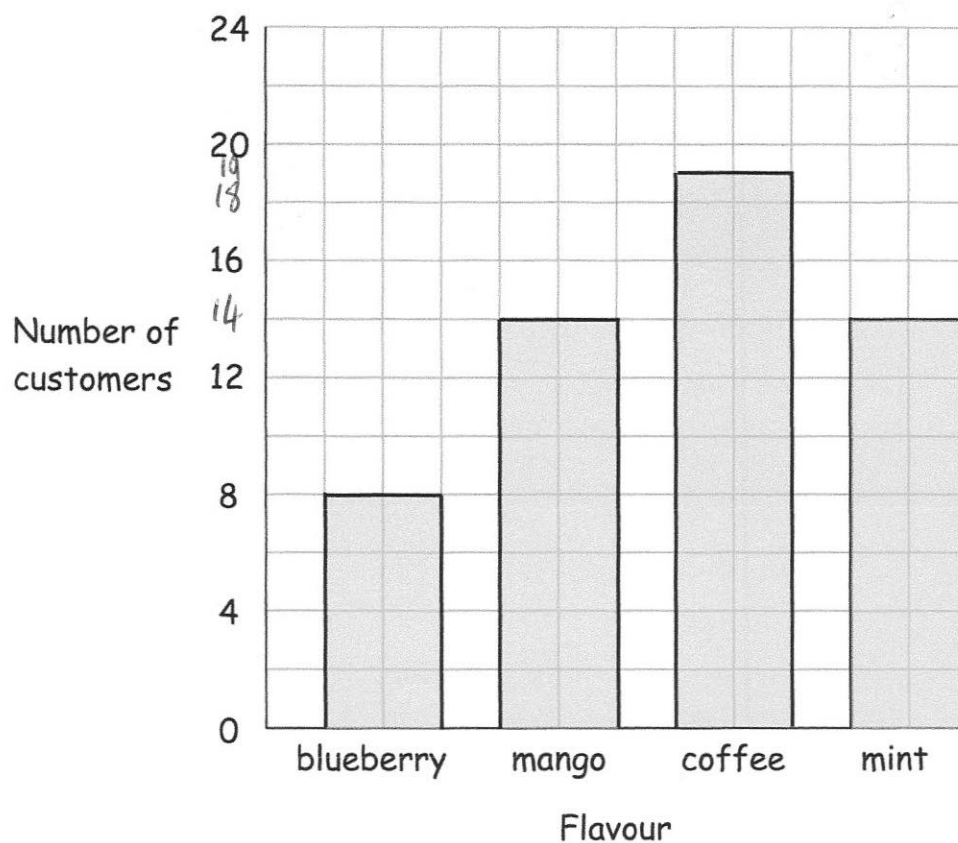
$4 - 1 = 3$

3

(1)

5. Conan owns a cake shop.

He trials four new flavours of cheesecake: blueberry, mango, coffee and mint.

Conan asked a group of customers to vote for their favourite flavour.

(a) What is the least popular flavour?

Blueberry

(1)

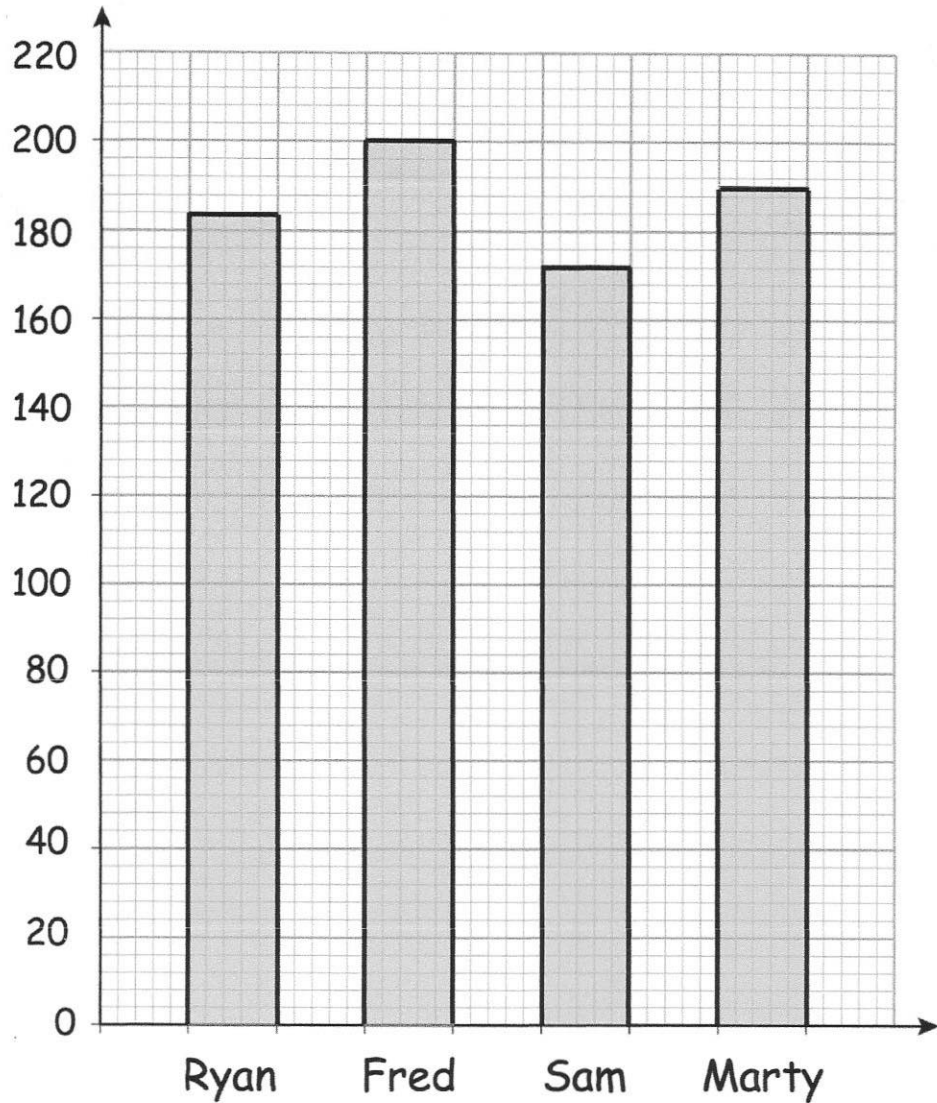(b) Which two flavours had the same number of votes?

Mango and Mint

(1)

(c) How many customers did Conan survey?

$8 + 14 + 19 + 14 = 55$

55

(2)

6. The heights of four athletes are shown below.

$20 \div 5 = 4$

Height (cm)

(a) Who is the shortest athlete?

Sam

(1)

(b) Write down Ryan's height.

184 cm

(1)

(c) Work out the range of the weights.

$200 - 172 = 28$

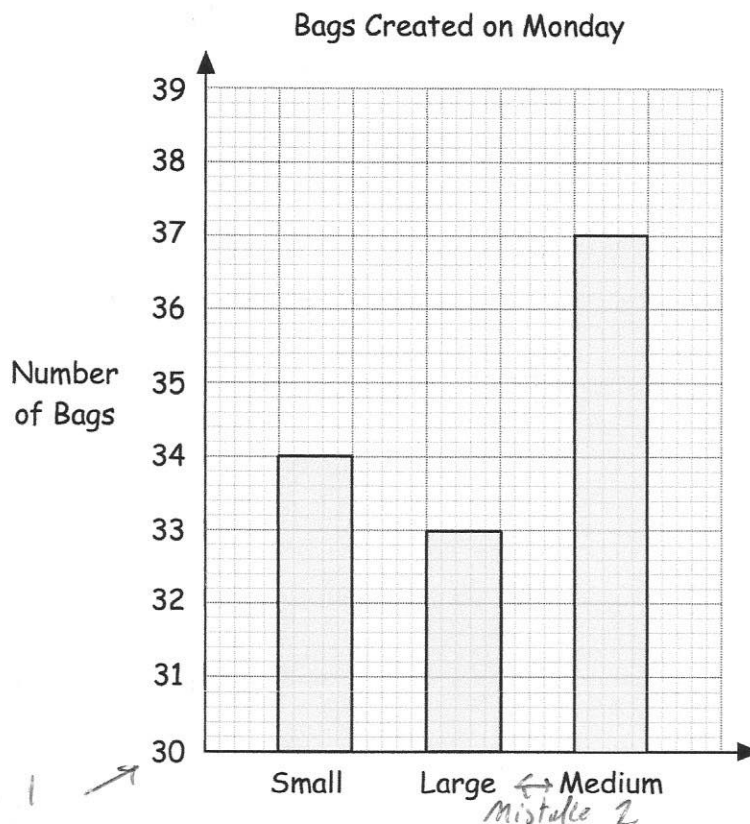28 cm kg

(2)

© Corbettmaths 2024

7. A factory makes small, medium and large bags.

The table shows the number of each bag created on Monday.

Size	Number of Bags
Small	34
Medium	33
Large	37

Nicola drew this bar chart for the information.

Bags Created on Monday

Mistake 1 ↗

Mistake 2

Write down two things that are wrong with this bar chart.

Mistake 1:

The vertical axis should start at zero.

Mistake 2:

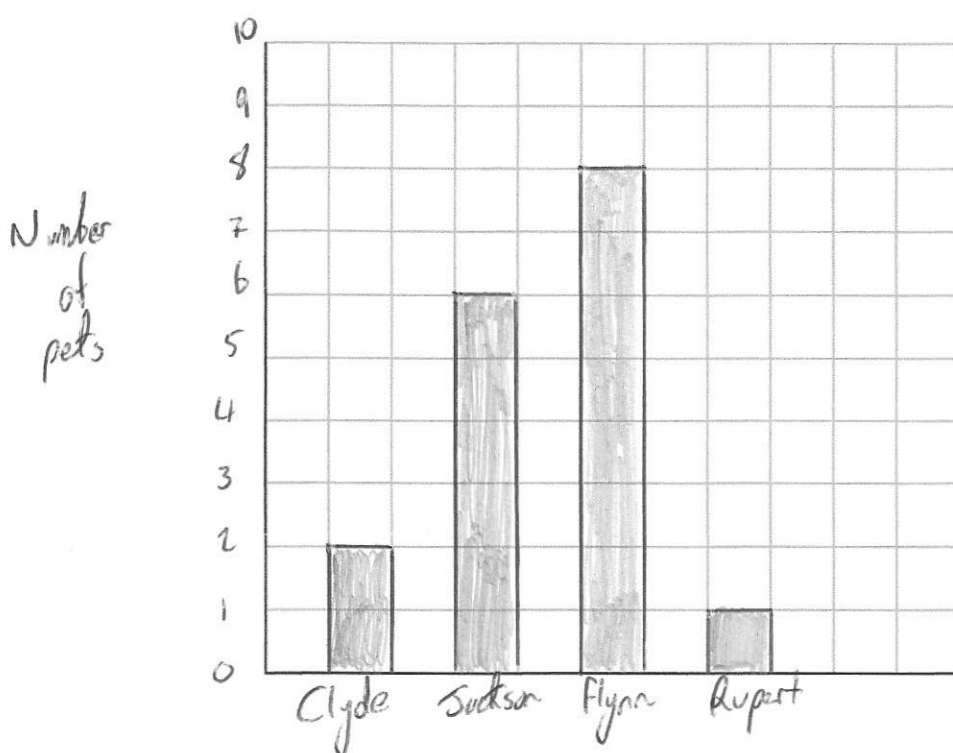Nicola should have labelled the bars small, medium and large; not small, large and medium.

(2)

8. The table below shows the number of pets owned by four friends.

Name	Number of Pets
Clyde	2
Jackson	6
Flynn	8
Rupert	1

(a) On the grid, draw a bar chart to show the information in the table.

(3)

(b) Work out the median of the number of pets owned.

X 2 6 8

4

(2)

(c) Work out the range of the number of pets owned.

8 - 1 = 7

7

(2)

9. A box contains 20 counters.
    The table below shows information about the colour of the counters.

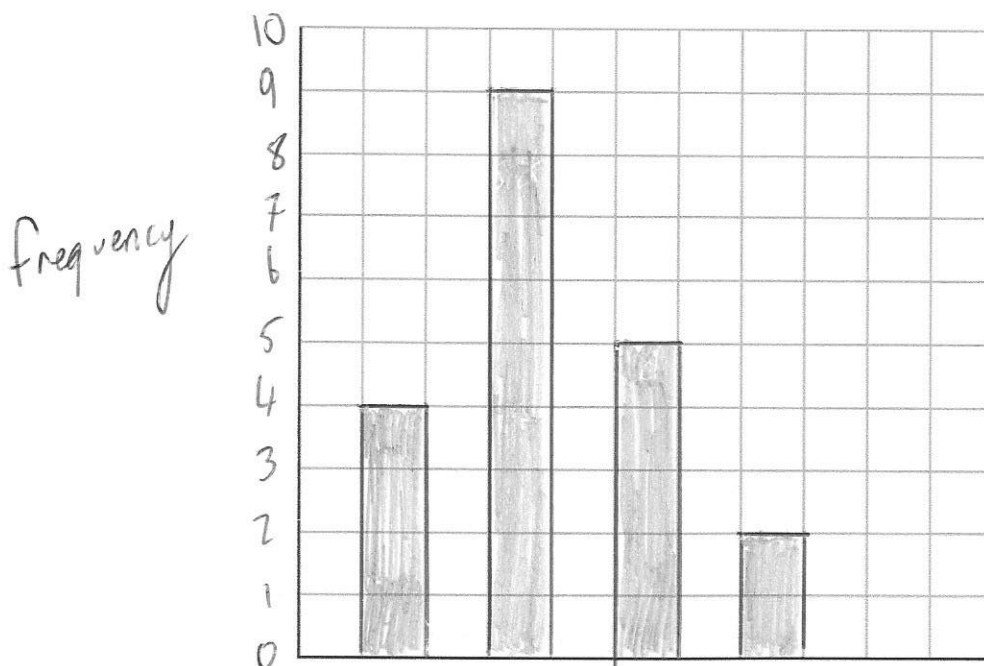| Colour	Frequency
Blue	4
Green	9
Red	5
Yellow	2

A counter is picked at random from the box.

(a) Write down the probability that the counter is **not green**.

$4 + 5 + 2 = 11$

$\frac{11}{20}$

....

(2)

(b) On the grid, draw a bar chart to show the information in the table.

frequency

(3)

© Corbettmaths 2024
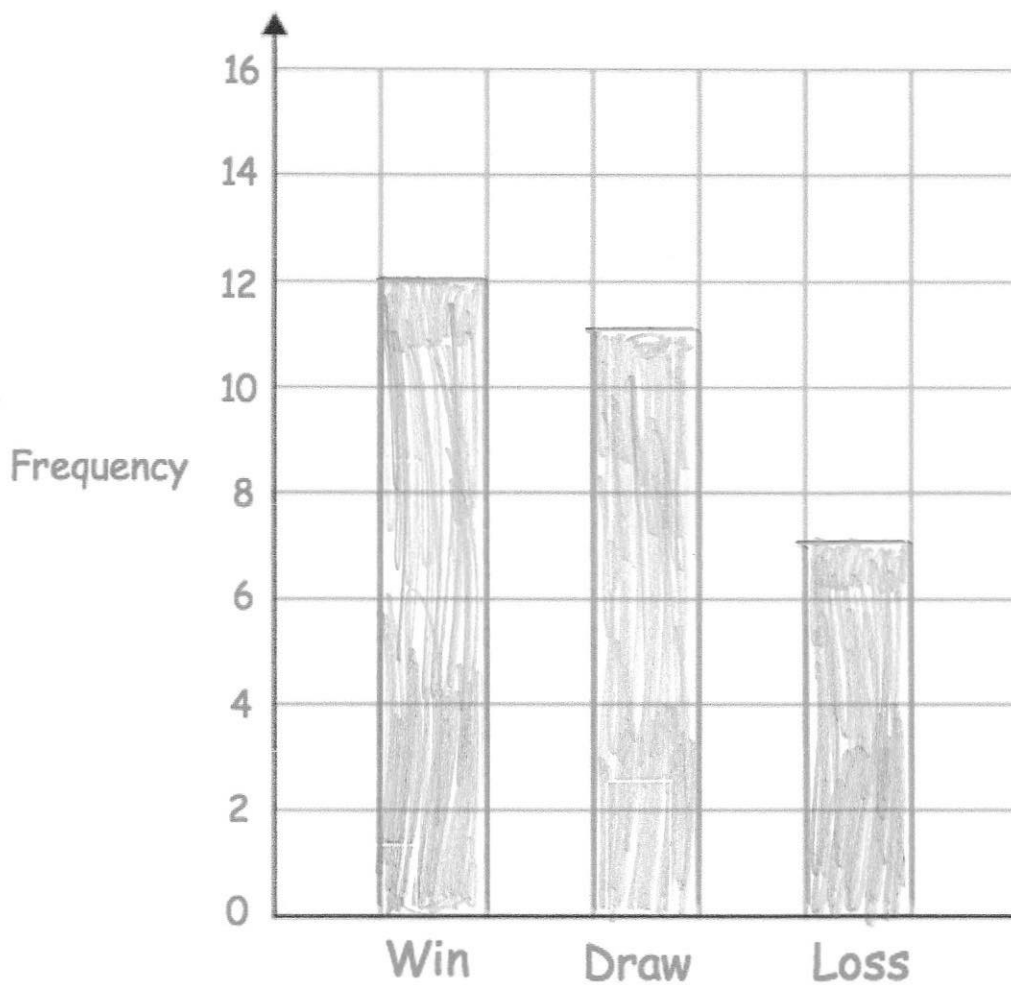
10. Cardiff Rovers Football Club played 30 games in a season.

(a) Complete the tally and frequency columns.

Result	Tally	Frequency
Win	⊬⊬ ⊬⊬ ||	12
Draw	⊬⊬ ⊬⊬ |	11
Loss	⊬⊬ ||	7

(3)

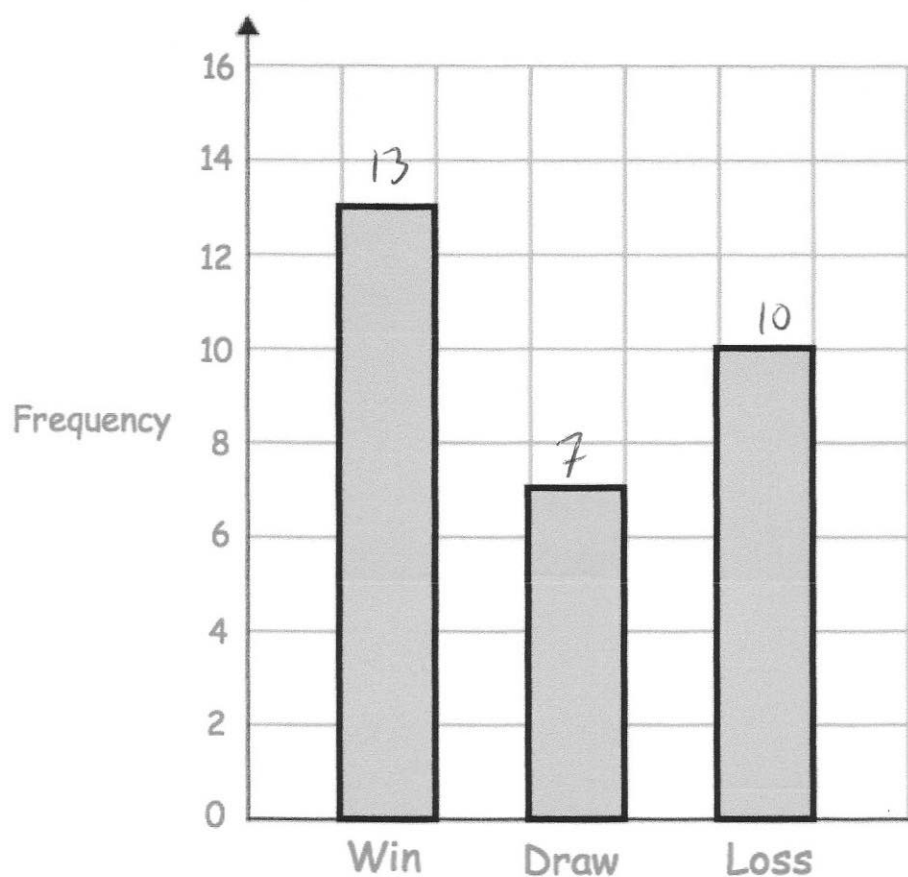(b) Draw a bar chart to show this information.

(2)

(c) What was the most common type of result for Cardiff Rovers?

Win

(1)

(d) Newport United Football Club play in the same league.

Their results in the same season are shown below.

A win is worth 3 points.
A draw is worth 1 point.
A loss is worth 0 points.

Which club finished the season with more points and by how many?

Cardiff:
$12 \times 3 = 36$
$11 \times 1 = 11$
$+$
47

Newport:
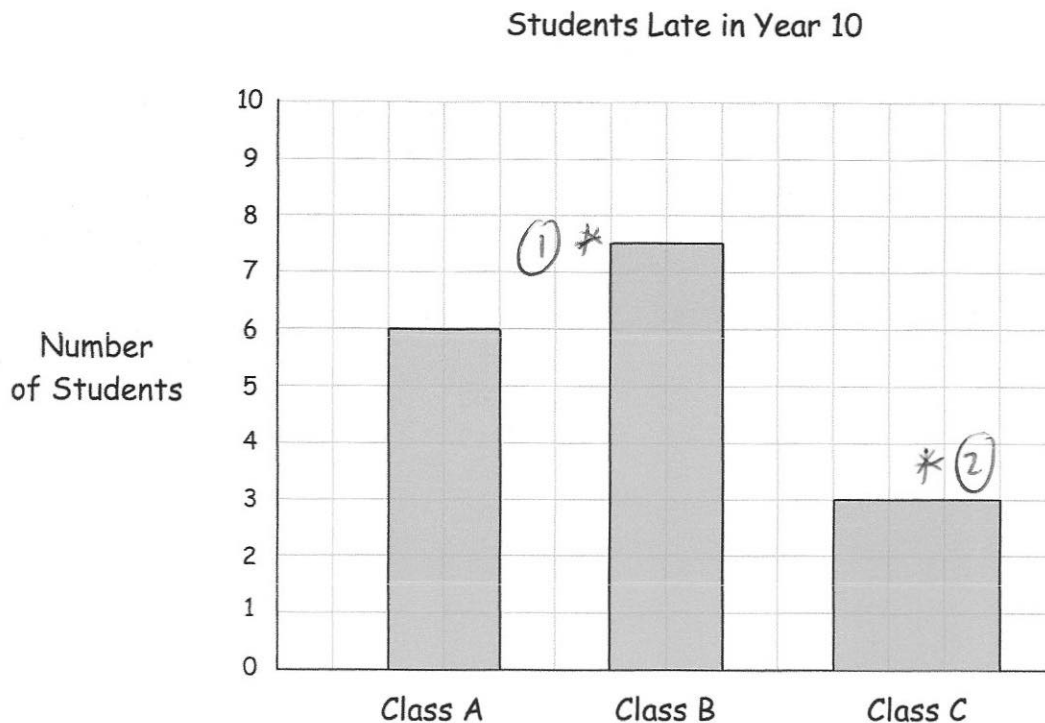$13 \times 3 = 39$
$7 \times 1 = 7$
$+$
46

Cardiff by _1_ points

(4)

11. A teacher records the number of students late in the three classes in Year 10.

The teacher draws this bar chart to represent the results.

Students Late in Year 10

Write down two things that are wrong with the bar chart.

Mistake 1:

The height of Class B is wrong - it cannot be inbetween 7 and 8.
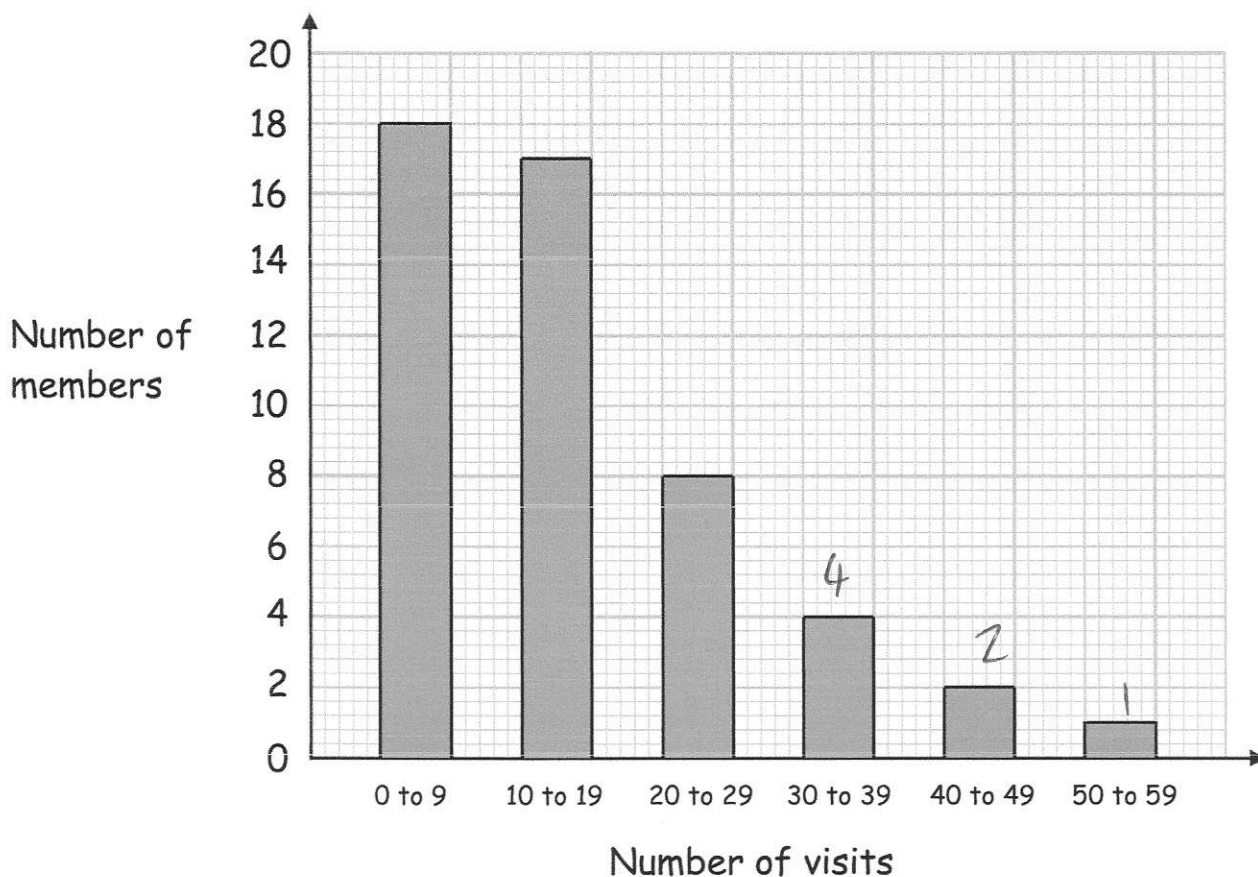
Mistake 2:

The width of Class C needs to be the same as the other two classes.

(2)

12. Chloe manages a gym that has 50 members.

The chart shows information about the number of visits the members made to the gym over the past two months.

(a) Work out the fraction of the members that visited the gym **less than 10** times.

$$\frac{18}{50} = \frac{9}{25}$$

.... $\frac{9}{25}$

(2)

(b) Work out the percentage of the members that visited the gym **30 or more** times.

$$\frac{7}{50} = \frac{14}{100}$$
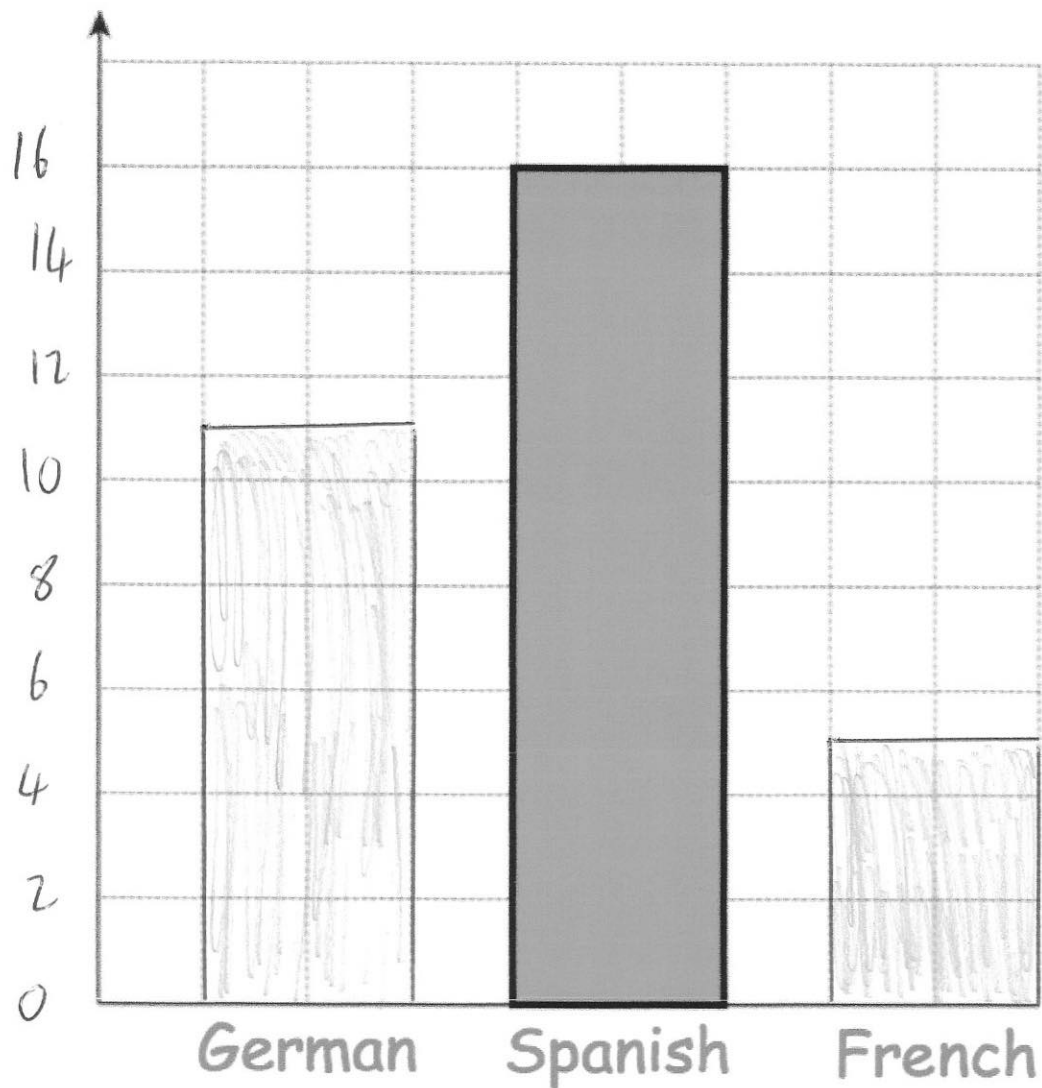
.... 14 %

(2)

13. Miss Jackson asked the 32 students in her tutor group which language they study.

Each student studies one language only.

Half of the students in the tutor group study Spanish.
Six more students study German than French.

11 5

Complete the bar chart.

$32 \div 2 = 16$ (spanish)

$11 + 5 = 16$
(german) (french)

(4)

14. Four classes raise money for charity.

Miss Williams starts to create a bar chart and pictogram to represent how much money they raised.
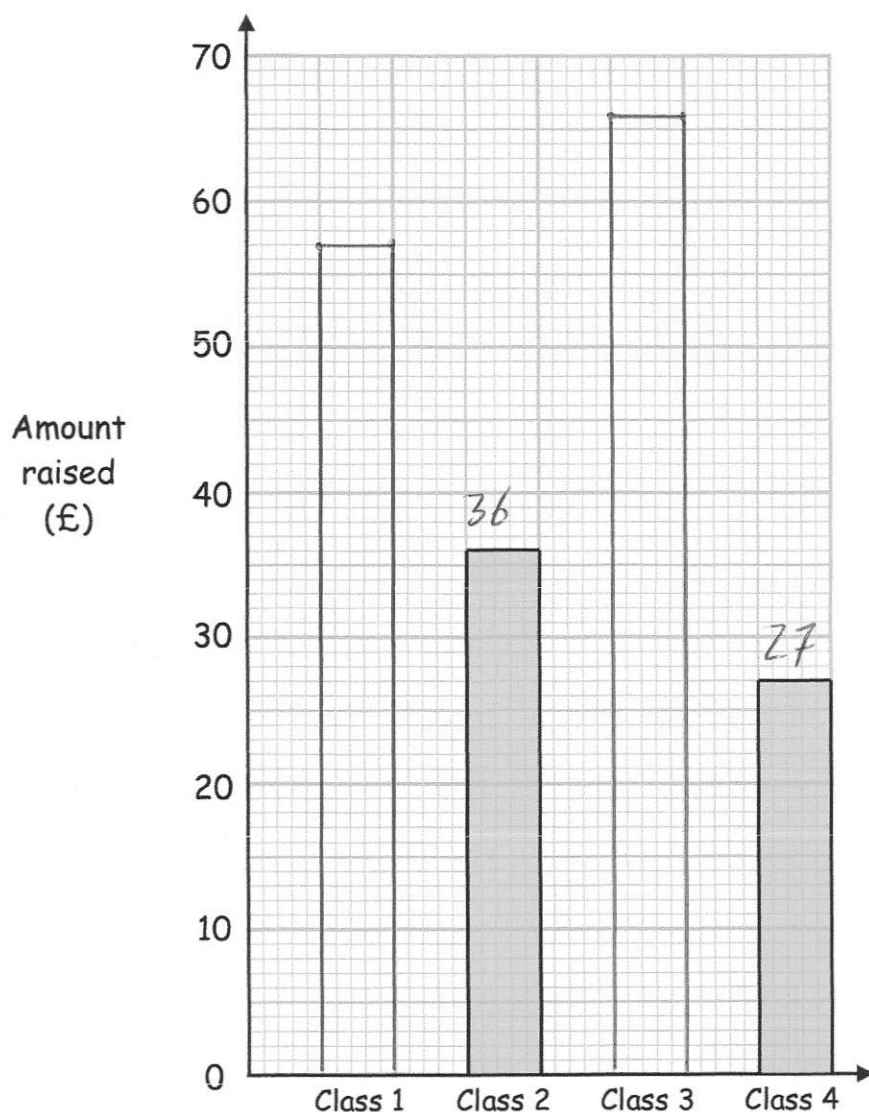
Complete the bar chart and pictogram.

Key: ◯ represents £ 12

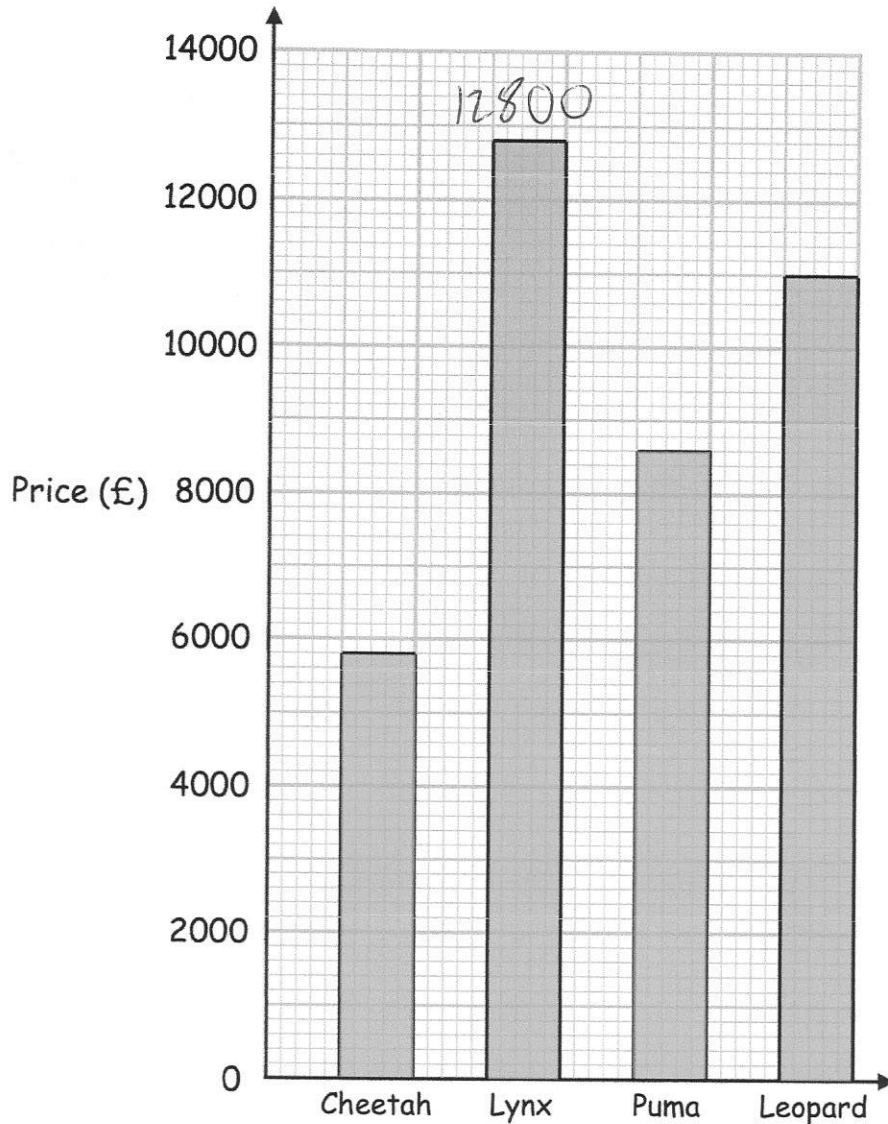|	
Class 1	◯ ◯ ◯ ◯ ◖
Class 2	◯ ◯ ◯
Class 3	◯ ◯ ◯ ◯ ◯ ◖
Class 4	◯ ◯ ◖

$36 \div 3 = 12$

$4.75 \times 12 = 57$

$5.5 \times 12 = 66$

$27 \div 12 = 2.25$

(4)

15. The prices of four motorcycles are shown below.

Lewis buys the Lynx motorcycle.

He pays a deposit of £1500 and then pays the rest over 40 equal monthly payments.

How much is each monthly payment?

$12800 - 1500 = 11300$

$11300 \div 40 = £282.50$

£ 282.50

(4)