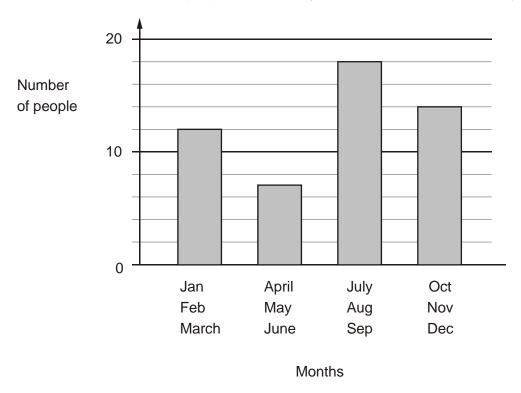
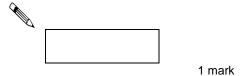
1. Class 6 did a survey of birthday dates.

This chart shows the number of people with birthdays in each three months of the year.



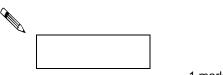
From the chart, how many people have a birthday before July?



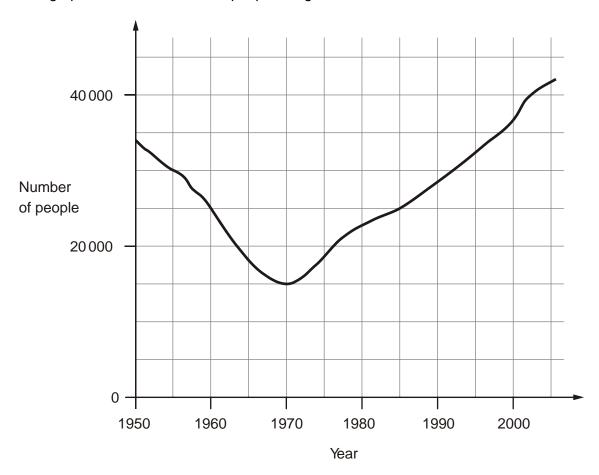
Nobody has a birthday in October.

Six people have a birthday in November.

How many people have a birthday in December?

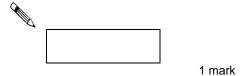


2. This graph shows the number of people living in a town.

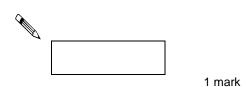


Look at the graph.

How many people lived in the town in 1985?



In which year was the number of people the same as in 1950?

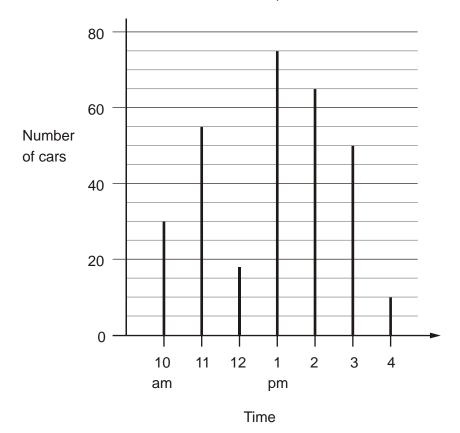


Find the year when the number of people first went below 20 000



1 mark

3. This chart shows the number of cars in a car park at different times on one day.



There are 80 cars in the car park when it is full.

How many empty spaces were there in the car park at 3pm?



Circle all the times when the car park was less than half full.



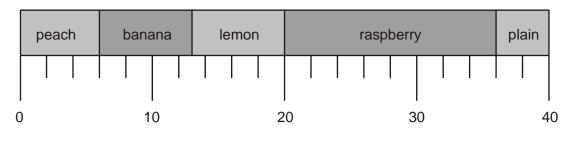
10 11 12 1 2 3 4 am am noon pm pm pm pm

1 mark

4. 40 children each chose their favourite flavour of yogurt.

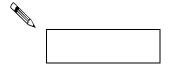
This chart shows the results.

yogurt flavour



number of children

How many children chose lemon yogurt?



1 mark

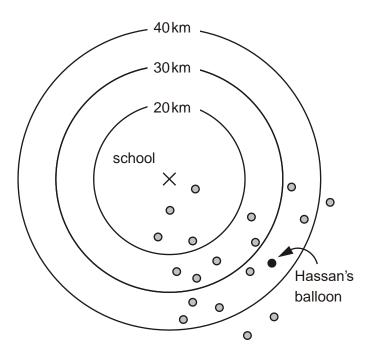
How many more children chose raspberry than plain yogurt?



**5.** Class 6 launched some balloons at a school fete.



This diagram shows how far some of the balloons travelled.



How many balloons on the diagram travelled between 20km and 30km?

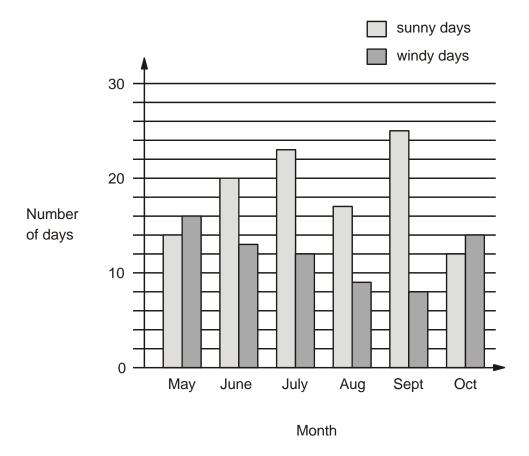


Estimate how far Hassan's balloon travelled.



1 mark

**6.** The chart shows the number of sunny days and the number of windy days in six months.



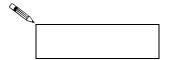
Which months had more windy days than sunny days?

4	 	 	

How many months	had more than	15 sunny days?
-----------------	---------------	----------------



How many more sunny days than windy days were there in **June**?



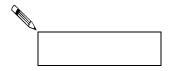
1 mark

7. Some children were asked to choose their favourite animal in the zoo.

This table shows the results.

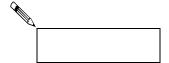
	Girls	Boys
zebra	9	3
lion	4	9
giraffe	7	4
monkey	8	7
elephant	6	5

How many more girls than boys chose giraffes?



1 mark

How many more boys chose lions than elephants?

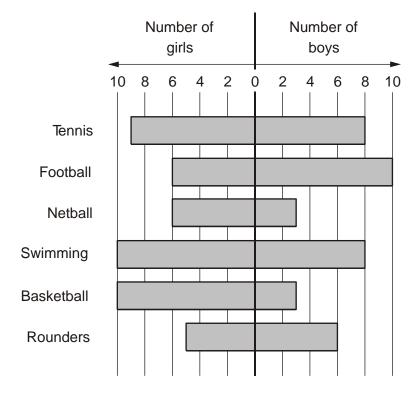


Which animal was chosen by the greatest number of children?

	1 mark

8. Some children each chose their favourite sport.

This chart shows the results.



Which sport was chosen by the most children?



How many more girls than boys chose basketball?

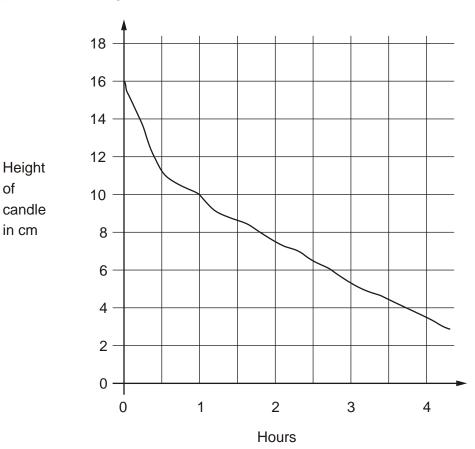


Write all the sports that were chosen by more boys than girls.

.....

1 mark

This graph shows the height of a candle as it burns. 9.



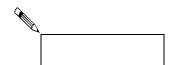
Look at the graph.

of

What is the height of the candle after 2 hours?



How long does the candle take to burn down from 16cm to 4cm?

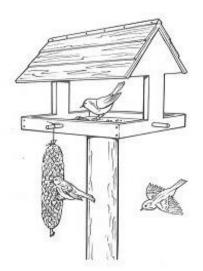


1 mark

**10.** Rosie collects data about birds visiting a bird table.

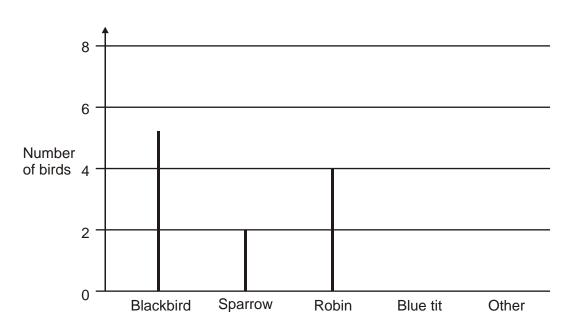
Here are her results.

Blackbird	JHT
Sparrow	
Robin	
Blue tit	
Other	##1



Draw **two** more lines to complete the graph.





1 mark

Rosie saw 20 birds altogether.

What fraction of the birds were blackbirds?

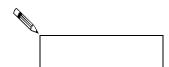




11. Five children have ticked this table to show on which days they are free to go out.

	Emma	David	Lin	Jack	Rosie
Mon		<b>✓</b>	<b>✓</b>		<b>✓</b>
Tue	<b>✓</b>		✓	✓	
Wed		✓			✓
Thu			✓	✓	✓
Fri	✓	✓			✓

On how many days are **more than two** children free to go out?

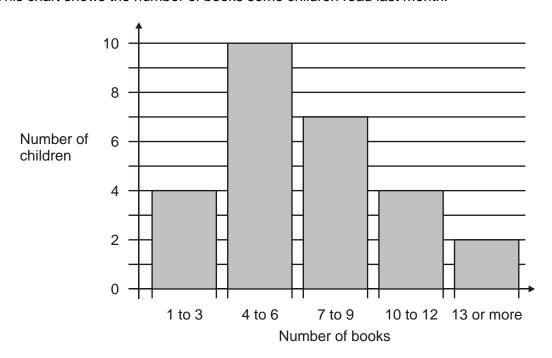


1 mark

On which days are Lin and Rosie both free to go out together?



**12.** This chart shows the number of books some children read last month.



How many children altogether read more than 9 books?



7 children read 4 books.

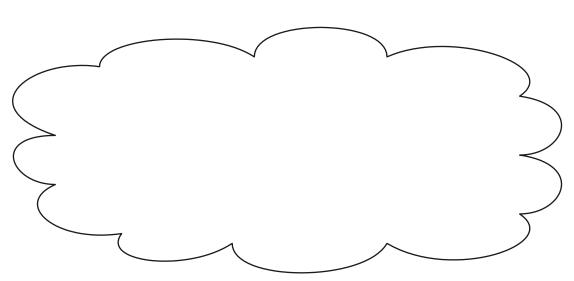
1 child read 5 books.

Lin says,

## 'That means 2 children read 6 books'.

Explain how she can work this out from the chart.

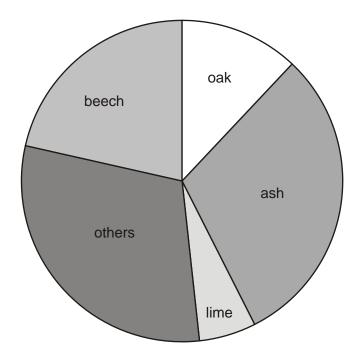




# **13.** Class 6 did a survey of the number of trees in a country park.



This pie chart shows their results.

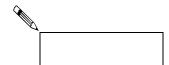


Estimate the **fraction** of trees in the survey that are **oak** trees.



The children counted 60 ash trees.

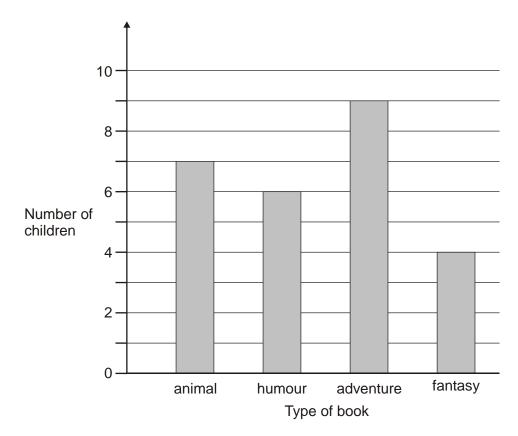
Use the pie chart to estimate the **number** of **beech** trees they counted.



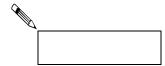
1 mark

**14.** Class 6 did a survey of their favourite types of story book.

Here are their results.

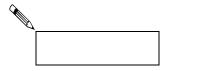


How many more children chose adventure books than fantasy books?



Five girls chose **animal** books.

How many boys chose animal books?

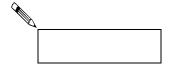


1 mark

15. Here is a sorting diagram with four sections, A, B, C and D.

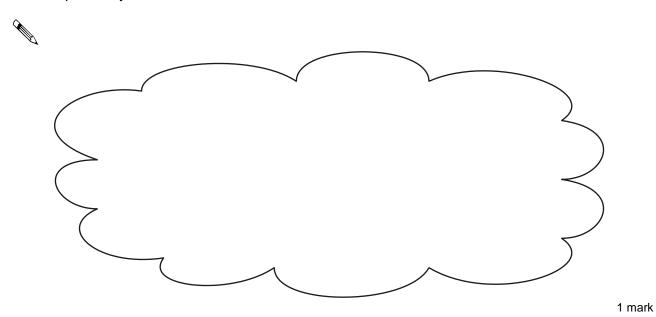
	multiple of 10	not a multiple of 10
multiple of 20	Α	В
not a multiple of 20	С	D

Write a number that could go in section C.

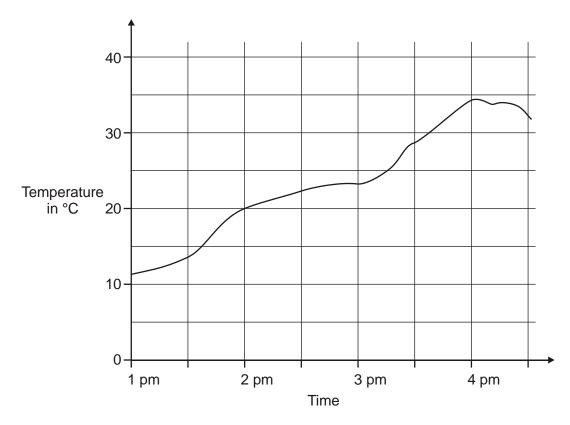


Section **B** can never have any numbers in it.

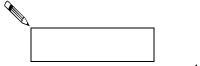
Explain why.



**16.** This graph shows the temperature in a greenhouse.

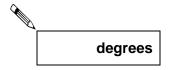


Use the graph to find the time when the temperature was 25°C.



1 mark

Use the graph to find the difference between the temperature at 2 pm and the temperature at 4 pm.



1 mark

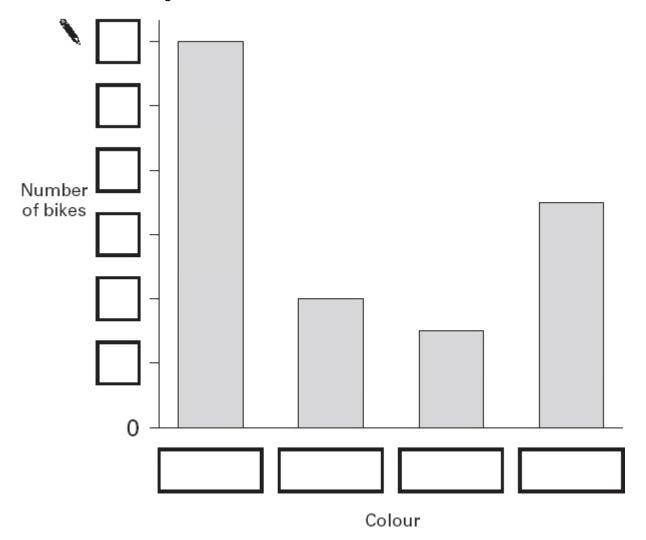
17. Robbie collected information about the colours of some bikes.

Here are his results.

Colour	Number of bikes
green	4
red	7
blue	12
pink	3

This bar graph shows the information from the table.

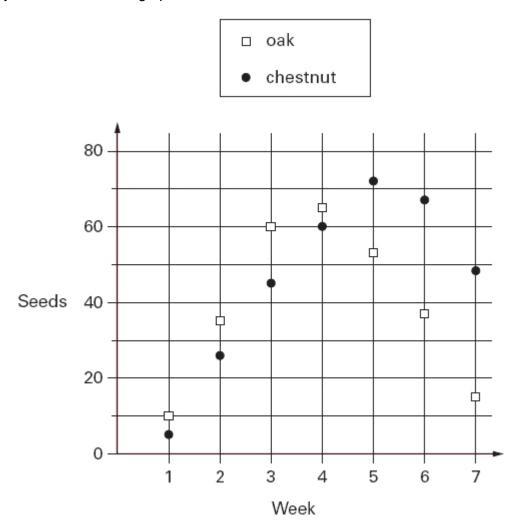
Fill in **all** the missing labels.



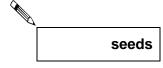
2 marks

**18.** Class 6 count how many seeds they find under two trees.

They show the data in a graph.



How many seeds did they find in week 3 altogether?

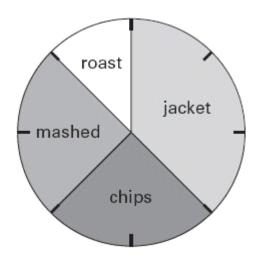


1 mark

In how many weeks did they find more than 40 chestnut seeds?



19. This pie chart shows how the children in Class 6 best like their potatoes cooked.



32 children took part in the survey.

Look at the four statements below.

For each statement put a tick ( ) if it is **correct**.

Put a cross (**X**) if it is **not correct**.



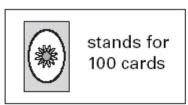
10 children like chips best.	
25% of the children like mashed potatoes best.	
$\frac{1}{5}$ of the children like roast potatoes best.	
12 children like jacket potatoes best.	

2 marks

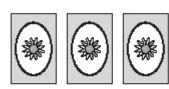
## **20.** A shop sells different kinds of greeting cards.



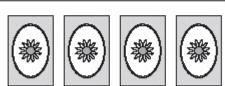
This pictogram shows how many they sold in a week.



Birthday cards



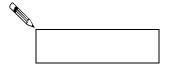
Thank You cards



Get Well cards



Estimate how many Birthday cards were sold.



1 mark

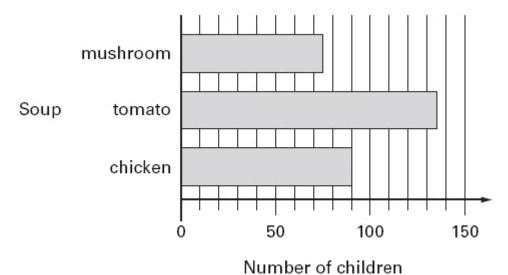
Estimate how many more Thank You cards than Get Well cards were sold.



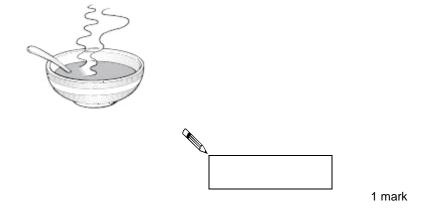
1 mark

21. All the children at Park School chose their favourite soup.

The graph shows the results.



How many more children chose chicken soup than mushroom soup?



Robbie says,

## 'More than half of the children chose tomato soup'.

Is he correct? Circle Yes or No.



Explain how you can tell from the graph.

### 22. On Monday all the children at Grange School each play one sport.

They choose either hockey or rounders.





There are **103** children altogether in the school.

27 girls choose hockey.

Write all this information in the table. Then complete the table.



	hockey	rounders	Total
boys	22		
girls			53
Total			

2 marks





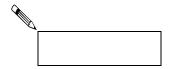


These are the prices of sandwiches, drinks and fruit.

Sandwiches		Drinks		Fruit	
cheese	£1.45	milk	55p	apple	15p
tuna	£1.70	cola	45p	pear	20p
salad	£1.20	juice	65p	melon	25p

Shereen buys a **tuna** sandwich, **milk** and a **pear**.

How much does she pay?



1 mark

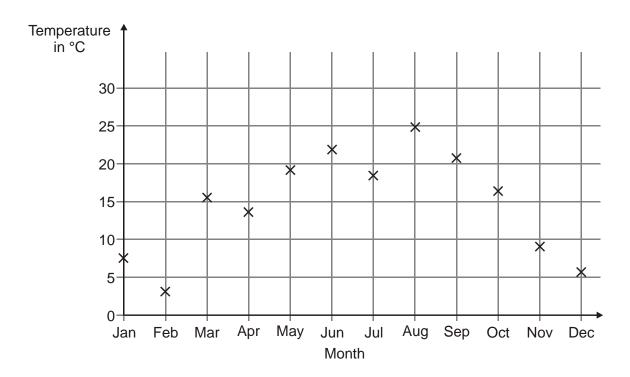
Mike has 80p to spend on a fruit and a drink.

What **two** things can he buy for exactly **80p**?

	1
a	 and

**24.** Abbie takes the temperature outside at midday on the first day of each month.

The graph shows her results from January to December.

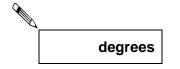


How many months on the graph show a temperature between 10°C and 20°C?



1 mark

Find the difference in temperature shown on the graph between July and August.



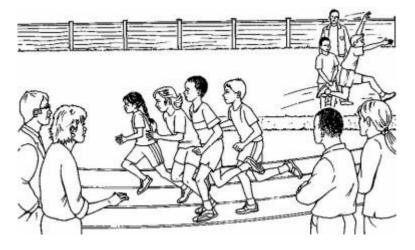
## **25.** Here is a sorting diagram for numbers.

Write a number less than 100 in each space.



	even	not even
a square number		
not a square number		

2 marks

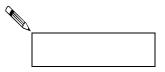


A school has sports day.

The winner of each event scores 10 points.

This chart shows the points scored by each team.

Event	Team				
	Red	Green	Blue	Yellow	White
100m	8	6	2	10	4
Long jump	10	2	6	4	8
Relay	4	6	8	10	2
High jump	8	2	10	6	4



1 mark

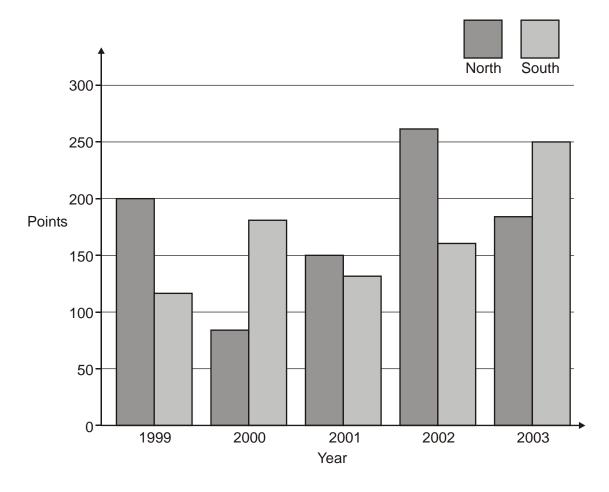
Which team came **second** in the **relay**?



### **27.** A school has a quiz each year.

There are two teams.

Here are their results.



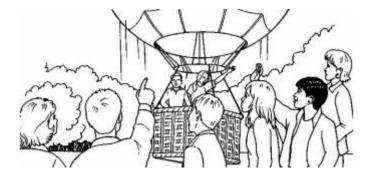
In which year did North beat South by 100 points?



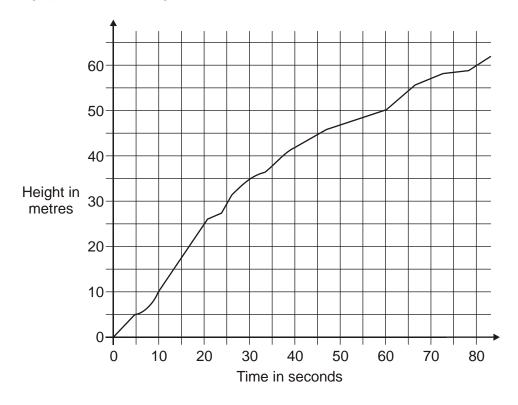
1 mark

In which year did South beat North by the greatest amount?

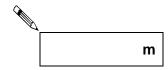




This graph shows the height of a balloon at different times.



From the graph, find the height of the balloon at 50 seconds.



1 mark

Use the graph to find out how long it took the balloon to rise from 30 metres to 60 metres.



1 mark

**29.** This table shows how many journeys a taxi driver made on five days and how much money he collected.

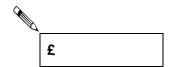
	number of journeys	money collected
Monday	23	£85
Tuesday	36	£112
Wednesday	18	£69
Thursday	31	£124
Friday	35	£109

How much money did he collect on the day that he made the most journeys?



1 mark

How much more money did he collect on Monday than on Wednesday?



## **30.** Some children ran in two races on sports day.

Here are their times.

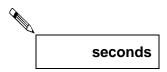
	100m race	800m race		
Elise	15.9 seconds	3 minutes 02 seconds		
Jake	19.7 seconds	2 minutes 58 seconds		
Teri	16.8 seconds	3 minutes 01 seconds		
Neil	17.1 seconds	2 minutes 59 seconds		
Barry	18.4 seconds	2 minutes 57 seconds		

Who finished the 100m race in second place?



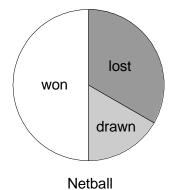
1 mark

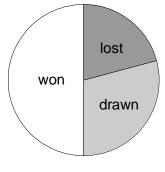
In the 800m race, how many seconds did Barry finish ahead of Elise?



1 mark

### **31.** The pie charts show the results of a school's netball and football matches.





Football

The netball team played 30 games.

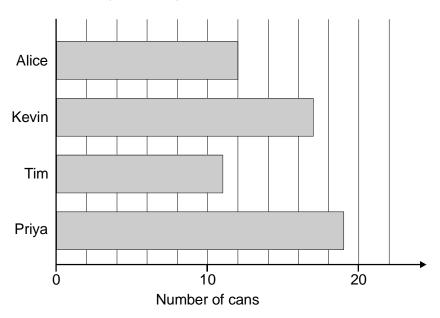
The football team played 24 games.

Estimate the percentage of games that the **netball team lost**.

			%		
				1 mark	
	David says,				
	'The two teams won the same number of games'.				
	Is he correct?	^			
	Circle Yes or No.		Yes / No		
	Explain how you know.				
<i>.</i>					
e7					
				1 mark	

### 32. Some children collect cans for recycling.

Here is a chart of how many cans they collect in the first week.



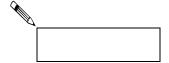
How many cans has Kevin collected?



1 mark

Alice's target is to collect 30 cans.

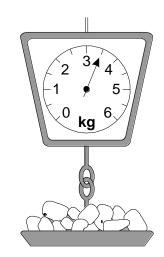
How many **more** cans does Alice need to reach her target?



**33.** This table shows the weight of some fruits and vegetables.

Complete the table.

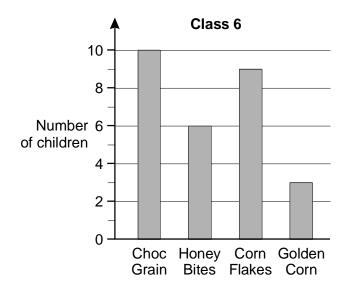
	grams	kilograms
potatoes	3500	3.5
apples		1.2
grapes	250	
ginger		0.03



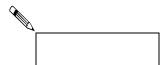
2 marks

**34.** Tom does a survey of children's favourite breakfast cereals.

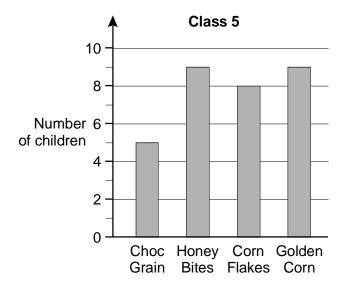
These are the results for Class 6



How many more children in Class 6 prefer Choc Grain than Golden Corn?



These are the results for Class 5

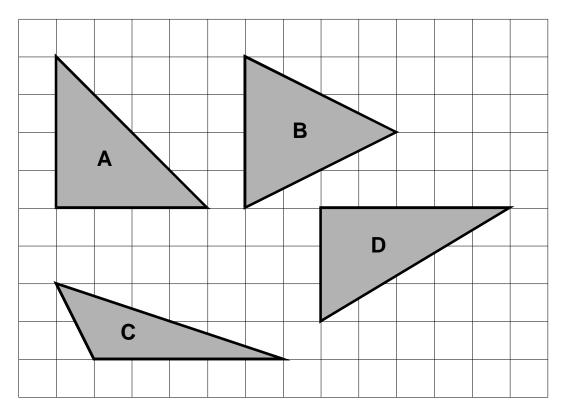


How many children in both classes like Honey Bites best?



1 mark

**35.** Here are four triangles drawn on a square grid.



Write the letter for each triangle in the correct region of the sorting diagram.

One has been done for you.



4			
	has a right angle	has an <b>obtuse</b> angle	has 3 <b>acute</b> angles
is isosceles	A		
is <b>not</b> isosceles			

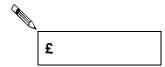
2 marks



The table shows the cost of coach tickets to different cities.

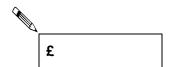
		Hull	York	Leeds
Adult	single	£12.50	£15.60	£10.25
	return	£23.75	£28.50	£19.30
Child	single	£8.50	£10.80	£8.25
Child	return	£14.90	£17.90	£14.75

What is the total cost for a **return** journey to York for one adult and two children?

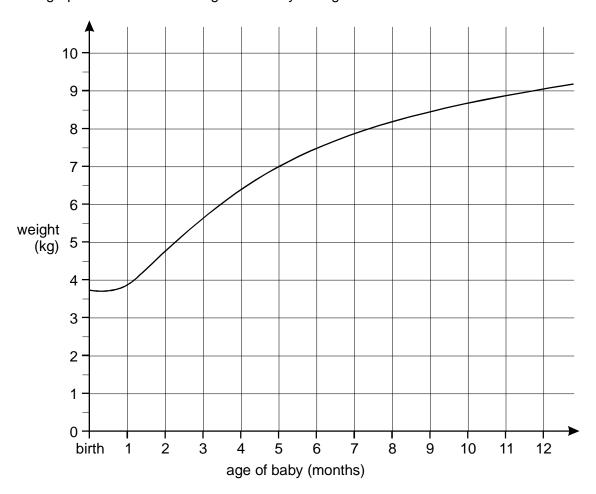


1 mark

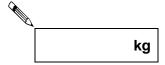
How much **more** does it cost for two adults to make a **single** journey to Hull than to Leeds?



**37.** This graph shows how the weight of a baby changed over twelve months.

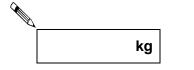


From the graph, what was the weight of the baby at 10 months?



1 mark

How much **more** did the baby weigh at 5 months than at birth?

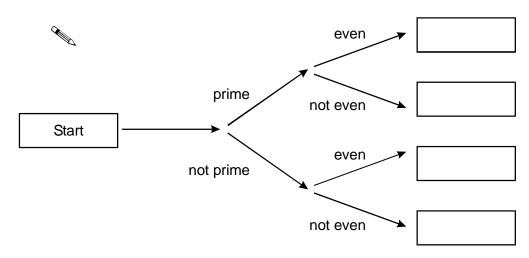


# **38.** Here is a diagram for sorting numbers.

Write these three numbers in the correct boxes.

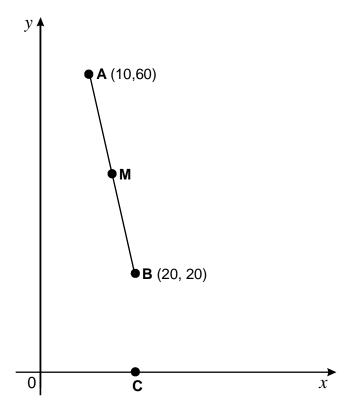
You may not need to use all of the boxes.

9 17 20



2 marks

39.

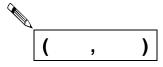


A is the point (10, 60)

B is the point (20, 20)

 ${\bf M}$  is the midpoint of line AB.

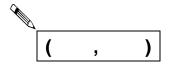
Write the coordinates of  $\mathbf{M}$ .

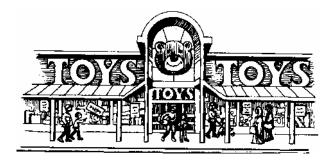


1 mark

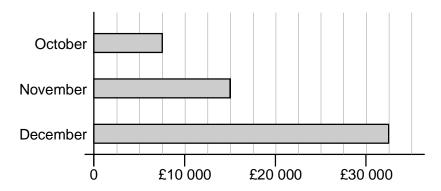
**C** is on the *x*-axis, directly **below B**.

Write the coordinates of **C**.

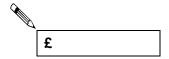




This chart shows the amount of money spent in a toy shop in three months.



How much more money was spent in the shop in December than in November?

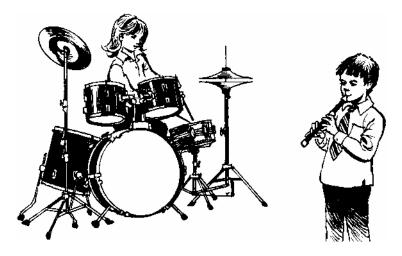


Stepan says,

# 'In November there was a 100% increase on the money spent in October'.

Is he correct?	^	
Circle Yes or No.	Yes / No	
Explain how you can tell from the chart.		
	1 ma	ırk

41.



This chart shows the musical instruments some children play.

	Lena	John	Rashid	Nicola	Yin
drums	<b>✓</b>	<b>\</b>		<b>\</b>	
keyboard			<b>✓</b>		
trumpet	<b>✓</b>				<b>√</b>
recorder			<b>✓</b>	<b>√</b>	<b>√</b>
piano	<b>✓</b>	<b>√</b>	<b>✓</b>		

Who plays both recorder and drums?

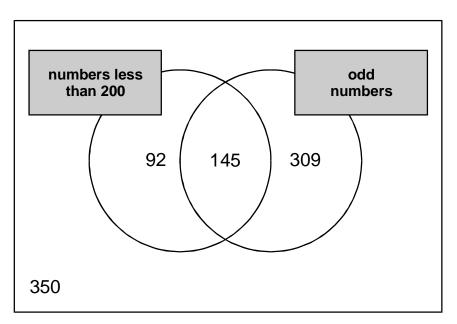
	1 mark
How many children play more than two musical instruments?	
	1 mark

**42.** Write these numbers in the correct places on the Venn diagram.

Some numbers are already placed.

# 99 170 221

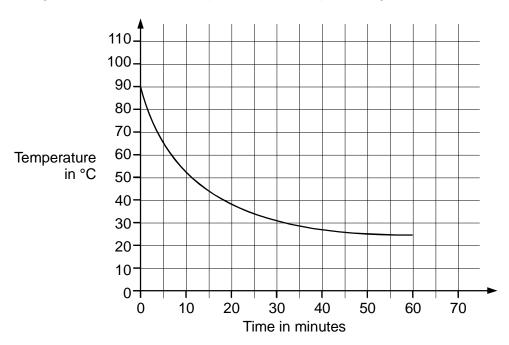




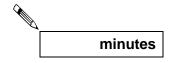
2 marks

**43.** A hot liquid is left to cool in a science experiment.

This graph shows how the temperature of the liquid changes as it cools.



Read from the graph how many minutes it takes for the temperature to reach 40°C



1 mark

Read from the graph how many minutes the temperature is above 60°C



#### 44.



This table shows the numbers of children who went walking, sailing or climbing at an outdoor centre.

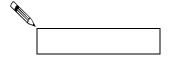
	May	June	July
walking	25	80	75
sailing	15	42	50
climbing	18	27	23

How many children went **sailing** in **May**, **June and July** altogether?



1 mark

How many more children went walking in June than climbing in June?

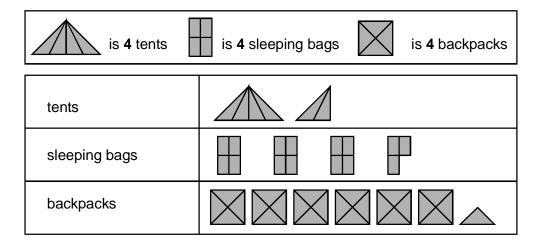




A camping shop sells tents, sleeping bags and backpacks.

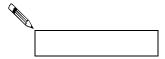
This chart shows how many of each they sold in June.

#### Items sold in June



The shop had 20 sleeping bags at the beginning of June.

How many of these sleeping bags did the shop have left at the **end of June**?



1 mark

In July, the shop sold three times as many tents as in June.

How many tents did the shop sell in July?

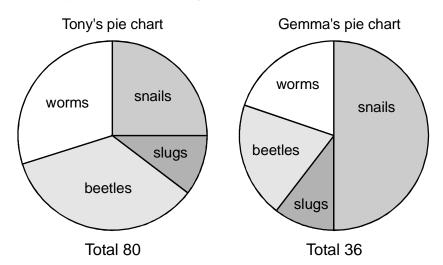


1 mark

**46.** Tony and Gemma looked for snails, worms, slugs and beetles in their gardens.

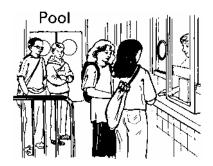


They each made a pie chart of what they found.



# $\label{eq:continuity} \textbf{Estimate} \text{ the number of } \textbf{worms} \text{ that } \textbf{Tony} \text{ found}.$

	1 mark
Who found more snails?  Circle Tony or Gemma.  Tony / Gemma	
Explain how you know.	
	 1 mark



These are the opening times at a swimming pool.

	ор	ening tim	es
	am		pm
Monday	-	Pool along	4
Tuesday	Pool closed		ı
Wednesday	10:30	to	5:30
Thursday	10:30	to	8:30
Friday	10:30	to	9:00
Saturday	8:00	to	6:00
Sunday	7:00	to	4:00

How many **hours** is the pool open on a **Sunday?** 



Which day has the latest closing time?

	1 mark

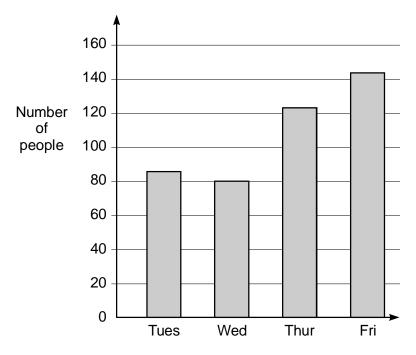
Habib arrives at the pool at 5:20pm on Saturday.

How many **minutes** is it before the pool closes?



1 mark

**48.** This bar chart shows how many people went to a school play.



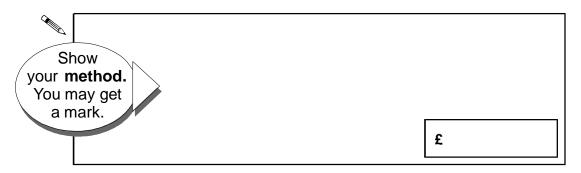
Estimate the number of people who went there on **Thursday** and **Friday** altogether.





Each person paid £2.25 for a ticket to get in.

How much ticket money was collected on Wednesday?



2 marks

**49.** *n* stands for a number.

Complete this table of values.



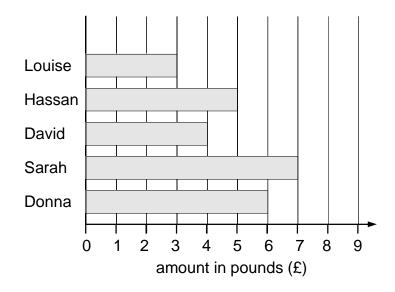
n	5 n – 2
20	
	38

2 marks

#### **50.** Five children collect money to plant trees.



Here is a bar chart of the amounts they have raised so far.

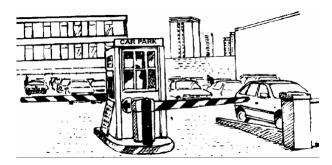


Their target is £40 altogether.

How much **more** money do they need to reach the target?



2 marks

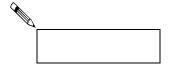


Car Park charges			
Time	Charge		
up to 1 hour	20p		
1 to 2 hours	50p		
2 to 3 hours	£1.00		
3 to 4 hours	£1.70		
over 4 hours	£5.00		

Emma parks her car at 9.30 am.

She collects the car at 1.20 pm.

How much does she pay?



1 mark

Dan and Mark both use the car park.

Dan says,

'I paid exactly twice as much as Mark but I only stayed 10 minutes longer'.

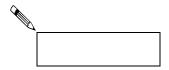
Explain how Dan could be correct.

**52.** These are the times letters are collected from a post box.

Monday to Friday	Saturday	Sunday
8am 2pm 6:30pm	11:30am	no collection



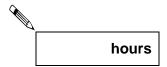
What is the latest time letters are collected on Wednesday?



1 mark

Carla posts a letter at 9 am on Monday.

How long will it be before it is collected?



1 mark

Gareth posts a letter on Saturday at 3pm.

When is it collected from the post box?

day	time	1 mark
day	time	1 m

**53.** Tom, Amy and Helen want to go on a boat trip.



There are three boats.



50 minute trip

Tickets £2.75 each

#### Heron

70 minute trip

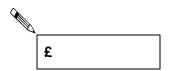
Tickets £3.50 each

# **Kestrel**

90 minute trip

Tickets £4.20 each

How much does it cost altogether for **three** people to go on the **Lark**?

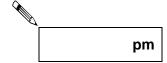


1 mark

Tom and Amy go on the **Heron**.

They leave at 2:15pm.

At what **time** do they return?



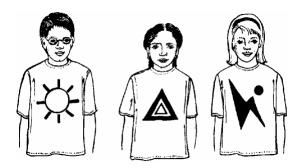
Helen goes on the **Kestrel** and **gets back at 4:15pm**.

At what **time** did the boat leave?



1 mark

#### **54.** Patterns are printed on T-shirts.

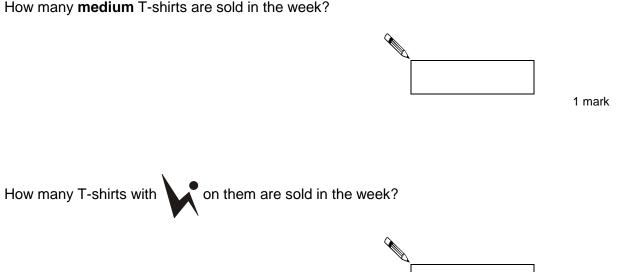


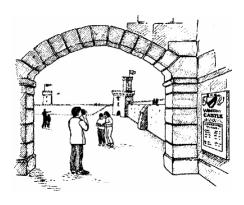
A shop sells 3 sizes of T-shirt, small, medium and large.

The table shows the number of T-shirts sold in one week.

T–shirts sold in one week					
		Pattern			
Sizes					
small	8	17	15		
medium	11	14	9		
large	14	5	8		

How many **medium** T-shirts are sold in the week?





# **Weston Castle Opening Times**

	July 1st to August 31st	September 1st to June 30th
Monday to Friday	10 am – 7 pm	closed
Saturday and Sunday	9 am – 8 pm	1 pm – 5 pm

At what time does the castle **close** on **Wednesday July 15<sup>th</sup>**?



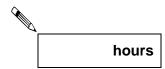
For which months is the castle open seven days a week?

|--|--|--|

On Sunday March 8<sup>th</sup> John goes into the castle at 3 pm.

He stays until closing time.

For how many **hours** does he stay in the castle?



1 mark

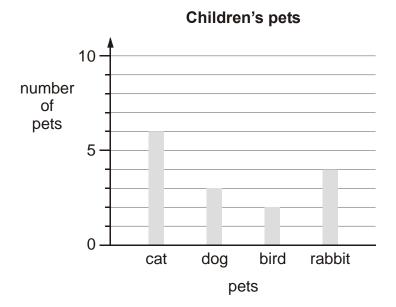
1 mark

**56.** Here is a table of the pets owned by **six** children.

Name of child	Cat	Dog	Bird	Rabbit
David	3	1	0	0
Julie	0	0	1	2
Carl	2	0	0	1
Terry	0	1	0	1
Mary	0	2	0	0
Hawa	1	0	1	1



Here is a graph of the pets of **five** of the children.



The pets of **one** of the children are not on the graph.

Whose pets are **not** on the graph? ...

1 mark

Explain how you know.

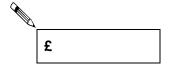
# **57.** Three children do a sponsored silence.



This is a chart of the money they collected.



Estimate how much **Sheena** collected.



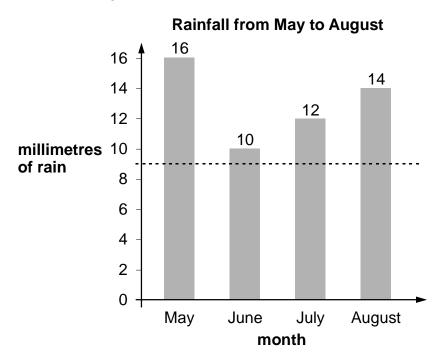
Together Gary and Pip collected more than £60.

Explain how the **chart** shows this.

	•••••	 	 

1 mark

#### **58.** Here is a bar chart showing rainfall.



Kim draws a dotted line on the bar chart.

She says,

'The dotted line on the chart shows the mean rainfall for the four months.'

Use the chart to explain why Kim cannot be correct.

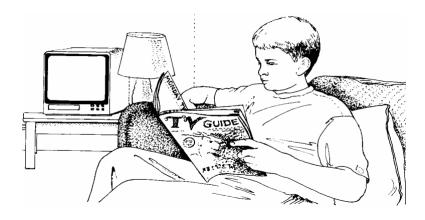
1 mark

What is the **mean** rainfall for the four months?



1 mark

59.



Here are the times of some television programmes.

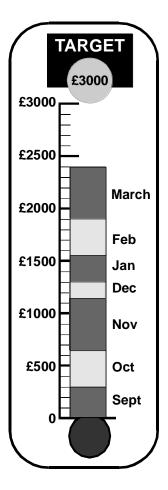
Channel 1				
7.00	Cartoon			
7.15	Film			
9.00	News			
9.30	Weather			
9.35	Sport			
10.20	Drama			
ĺ				

Channel 2				
7.00	Local News			
7.45	Quiz Show			
8.30	Comedy			
9.00	Hospital Drama			
10.00	Pop Chart			
10.40	Film			
1				

What is showing on Channel 2 at ten minutes to eight?	
	 1 mark
Tom watches Hospital Drama and then changes to Channel 1 at the	end.
What is showing on <b>Channel 1</b> when he changes channel?	
	1 mark
The film on Channel 2 starts at 10.40	
It lasts for one and a half hours.	
At what time does the film <b>end</b> ?	
	1 mark

# **60.** A school collects money for charity.

This chart shows how much has been collected.



The target is £3000.

Estimate how much **more** money the school needs to reach the target.



Anil says,

#### The chart shows that we will reach the target in two months.

	Use the chart to explain why Anil may be wrong.	
B		
		1 mark

**61.** Chris did a survey of the number of people who went into shops in one hour.

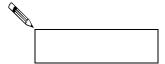


Number of people who went into a shop ++++ stands for 5 people		
Shoe shop	++++ ++++	
Newsagent	Ш	
Post Office	++++ ++++ ++++	
Bread shop	++++ ++++	
Supermarket	++++ ++++ ++++	

How many people went into the **Supermarket** in the hour?



How many more people went into the Post Office than the Shoe shop?

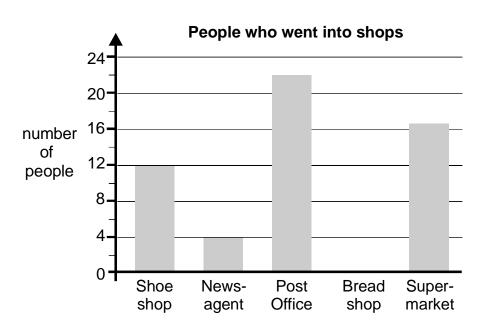


1 mark

Here is part of a bar chart of the information.

Draw in the **missing** bar.

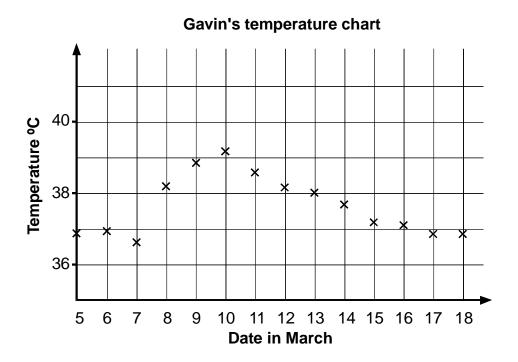




#### **62.** Gavin was ill in March.



This is his temperature chart.



For how many days was his temperature marked as **more than 37°C**?



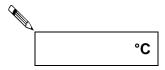
Which date showed the largest change in temperature from the day before?



1 mark

Estimate Gavin's **highest** temperature shown on the graph.

Give your answer to 1 decimal place.

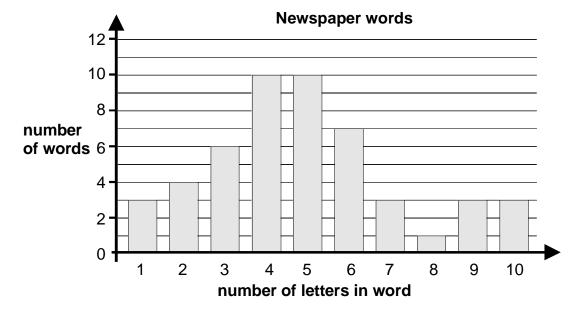


1 mark

#### **63.** Kelly chooses a **section** of a newspaper.

It has 50 words in it.

She draws a bar chart of the number of letters in each word.



#### What fraction of the 50 words have more than 6 letters?

