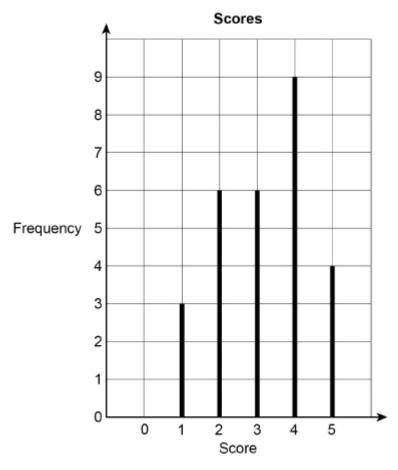
# **Non-Calculator**

# Q1.

The diagram shows the scores given by judges during a television show.



(a) Which score was the mode?

Answer \_\_\_\_\_\_\_(1)

(b) There were 4 judges.

Each judge gave one score in each round.

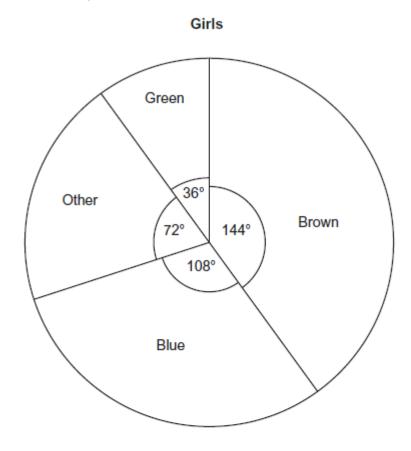
How many rounds were there?

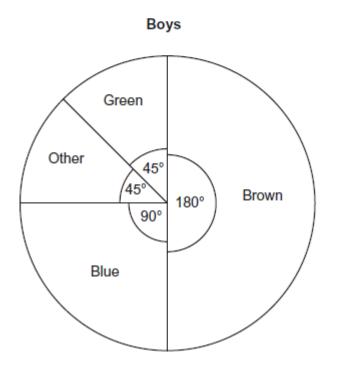
Answer \_\_\_\_

(3)

# Q2.

The pie charts show the eye colour of some students.





The radius of the girls' pie chart is 5 cm The radius of the boys' pie chart is 4 cm	
5 girls have green eyes.	
How many boys and girls altogether have blue eyes?	
Answer	
	(Total 5 marks)

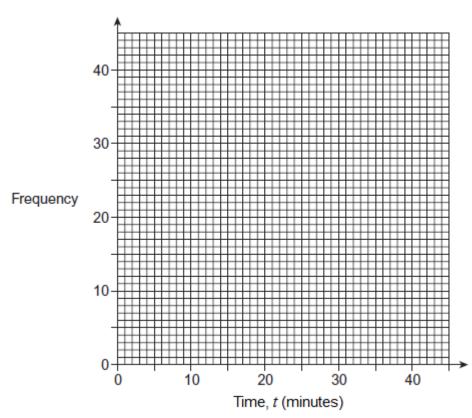
The areas of the pie charts are proportional to the number of students.

# Q3.

The times taken by 100 students to travel to school are shown.

Time, t (minutes)	Frequency
0 < <i>t</i> ≤ 10	36
10 < <i>t</i> ≤ 20	34
20 < t ≤ 30	18
30 < <i>t</i> ≤ 40	12

(a) Draw a frequency diagram for the data.



(2)

(b) The school has 600 students.

Estimate how many students take more than 20 minutes to travel to school.

Answer \_\_\_

(2)

Q4.

Billy asked 20 people,

"What is your favourite crisp flavour?"

(a) Complete the tally chart to show Billy's results.

Favourite crisp flavour	Tally	Frequency
Plain	### ###	12
Cheese and Onion	++++	
Barbecue		3
	Total	20

(2)

(b) Billy uses his tally chart to draw a pictogram.

Complete the pictogram and the key.

Plain

Cheese and Onion

Barbecue

Key:

(3)

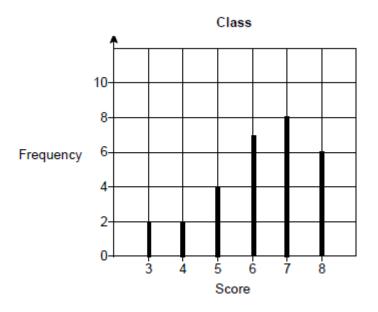
(Total 5 marks)

represents \_\_\_\_\_ people

# Q5.

Students in a class took a spelling test.

The diagram shows information about the scores.



Lucy is one of the 29 students in the class.

Her score was the same as the **median** score for her class.

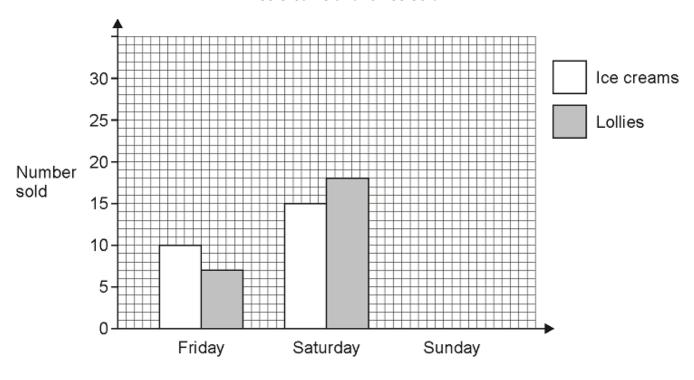
work out her score.	
	Answer

# Q6.

Mira sells ice creams and lollies.

The bar chart shows the number sold on Friday and Saturday.

# Ice creams and lollies sold



(a) An ice cream costs £1.20 A lolly costs 80p.

How much money did Mira take from selling ice creams and lollies on Friday?
Answer £

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(3)

(b)	Mira sold ice creams and Iollies on Friday, Saturday and Sunday. Altogether she sold 80.	
	On Sunday, she sold 2 <b>more</b> lollies than ice creams.	
	Complete the bar chart for Sunday.	
		(2)
	(Total 6 m	(3) arks)

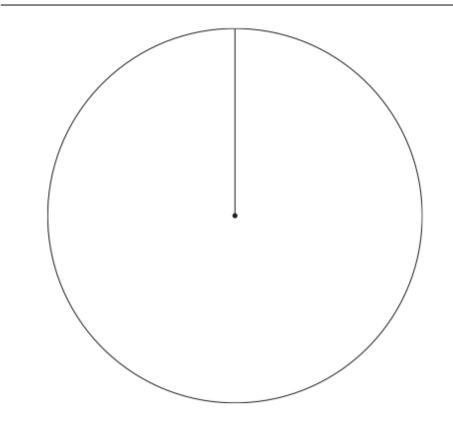
# Q7.

lan sells cans of drinks.

(a) The table shows the percentages of drinks sold on Monday morning.

Drink	Percentage Sold
Cola	30%
Lemonade	20%
Orange	50%

Draw a pie chart for the data.		



(4)

Col	а									
Len	nonade									
Ora	nge									
30 c	ans were so	old that afte	ernoon.							
How	many cans	of cola we	ere sold?	>						
		A	nswer_							
80 c	ans were al									
	ans were al Write dowr afternoon.	lso sold in n <b>one</b> diffe	the mori	ning.						
	Write dowr	lso sold in n <b>one</b> diffe	the mori	ning.						
80 c	Write down afternoon.	lso sold in n <b>one</b> diffe	the mori	ning.						
(i)	Write down afternoon.	s more can	the more	ning. etween t	he cans	sold in	the m	nornin	g and	

### Q8.

Eva owns a restaurant.

The table shows the number of customers on four days.

	Tuesday	Wednesday	Thursday	Friday
Lunch	25	22	27	31
Dinner	50	48	70	89
Total	75	70	97	120

(a)	How many <b>more</b> customers in total were there on Friday than on Thursday?
	Answer

(b) She keeps a tally of the number of customers who order pudding each day.

Complete the table.

Day	Tally	Frequency
Tuesday	<del>              </del>	17
Wednesday	### ### ###	
Thursday	<del>                   </del>	
Friday	1111 1111 1111 1111 1111	30

(2)

(c)	What fraction of <b>Friday's</b> customers ordered a pudding? Give your answer in its simplest form.

nswer\_\_\_\_

(2)

(2)

(d) Here is some information about Saturday.

Number of customers	150
Number who order pudding	50

Eva thinks the fraction of customers who ordered puddings on Saturday is greater than on Friday.

Is she correct?	
You <b>must</b> show your working.	
	(3)
	(Total 9 marks)

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Q9.

The table shows the number of desktop computers and laptops in 50 households.

Desktop computers

	0	1	2	3
0	0	6	1	0
1	5	10	4	4
2	1	8	5	0
3	3	2	1	0

Laptops

Δηςωρη	
Answer	
How many households have more laptops than desktop computers?	
Answer	
	(Total 3 mar

### Q10.

Amina asks 50 people,

"What is your favourite pet? Choose from cat, dog, rabbit or other."

(a) Which **two** words describe the type of data she collects from each person? Circle your answers.

qualitative continuous primary secondary

(1)

(b) Which **two** diagrams could she use to represent the data? Circle your answers.

scatter graph pie chart bar chart stem-and-leaf

(1)

Some girls and	boys voted for an extra luncht	ime sport.		
	Key: r	epresents 4 votes		
	Girls		Boys	
Basketball		Basketball	$\bigcirc\bigcirc\bigcirc\bigcirc$	
Cricket	$\bigcirc$ (	Cricket		
Football	$\bigcirc$	Football	000	
Netball	06	Netball		
(a) How man	y girls voted for football?			
	Answer			/4
(b) How man	y <b>more</b> girls than boys voted	for cricket?		(1
			_	
			_	(2
(c) Which sp Circle you	ort got the most votes altogethr answer.	ner?		

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Cricket

Football

Basketball

Netball

(1)

# Q12.

20 students give information about how they travel to school.

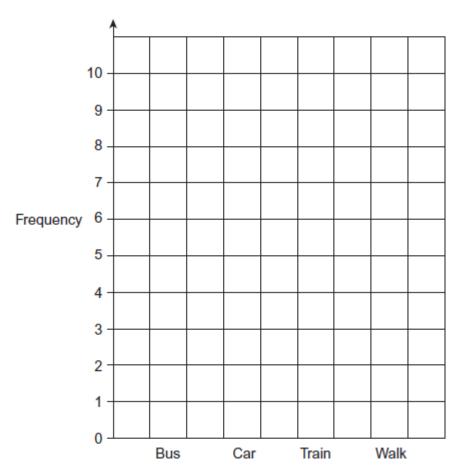
Half the students travel by bus.

7 students travel by car.

Twice as many students travel by train as walk.

Show this information on a bar chart.

#### How students travel to school



# Q13.

Olivia usually drives home from work. Some of her journey times are shown.

Week 1

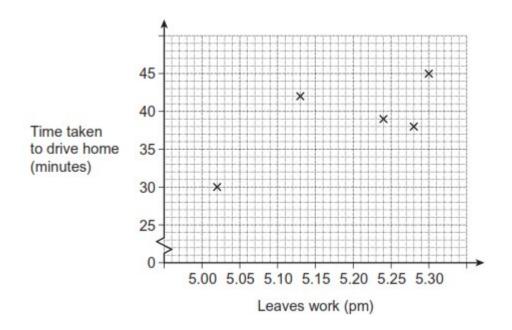
	Mon	Tue	Wed	Thu	Fri
Leaves work (pm)	5.13	5.24	5.30	5.28	5.02
Arrives home (pm)	5.55	6.03	6.15	6.06	5.32
Time taken (minutes)	42	39	45	38	30

### Week 2

	Mon	Tue	Wed	Thu	Fri
Leaves work (pm)	5.15	5.18	5.20	5.07	5.10
Arrives home (pm)	5.49	5.50	5.57	5.40	
Time taken (minutes)		32	37	33	121

(a)	How long did it take Olivia to drive home on Monday of week 2?	
	Answer minutes	(1)
(b)	On Friday of week 2 Olivia walked home.  What time did she arrive home?	
	pm	(2)

(c) Complete the scatter diagram for the **four** days she drives home in week 2.



(d) Estimate the time Olivia would have arrived home on Friday of week 2 if she had driven.

Use your scatter diagram to show how you decide.

۸	
Answer	pm

(3) (Total 8 marks)

(2)

### Q14.

A club rents films.

These were the films rented on Monday.

### Films rented on Monday

Comedy	12
Thriller	6
Romance	9
	Total = 27

(a)	Draw a picto	gram for this data.
	Use	to represent 4 films.
		Films rented on Monday
		Key: represents 4 films.
	Comedy	
	Thriller	
	Romance	

(b) This pictogram represents the films rented on Tuesday.

### Films rented on Tuesday

Key: to represents 2 films

Comedy	$\odot$ $\odot$ $\odot$ $\odot$
Thriller	$\odot$
Romance	◎ ◎ €

The club manager says,

"Looking at the total number of films rented on **Monday and Tuesday**, half of them were Comedy."

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(2)

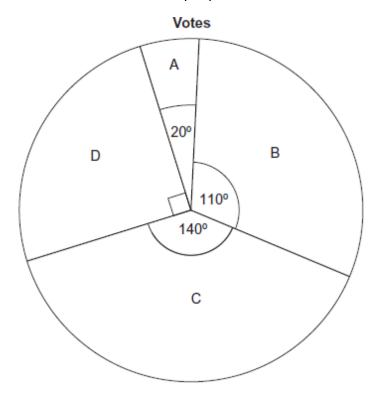
	v your working.		
	_		(Total
			(Total
ourite comput	er games for 60 students are sl	hown in the table.	
complete the t	able.		
Game	Tally	Frequency	
Α	+  + +  +	18	
В			
С		13	
D	++++ ++++	15	
E	++++ ++++		
	Total	60	
	d exactly one quarter of the stu	dents choose?	
Vhich game di			
Vhich game di	_		

Q15.

(2)

# Q16.

The pie chart shows information about how people voted in an election.



1800 people voted for D.

How many <b>more</b> people voted for C than B?			
Answer			
	(Total 3 marks		

**Q17.**A data logging machine counts people entering and leaving a museum.

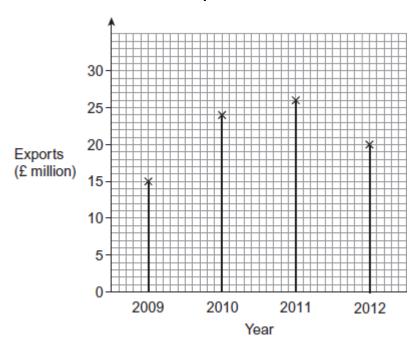
Hour ending at	Entering	Leaving
8 am	30	6
9 am	21	25
10 am	75	70
11 am	40	38

(a)	The museum opens at 7 am.	
	Show that there were 24 people in the museum at 8 am.	
		(1)
(b)	How many people were in the museum at 11 am?	
		_
		_
	Answer	_ (2)
	(Total 3	(2) (marks amarks

# Q18.

The diagram shows information about the exports of a company.





(a) Work out the **increase** in the exports from 2009 to 2010.

Answer £	_million
<del>-</del>	-

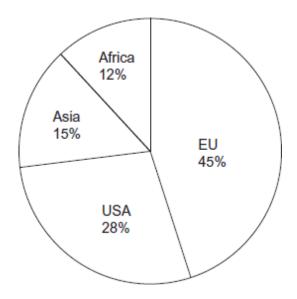
(b) Write the value of the exports in 2011 to 1 significant figure.

Answer £	million	
		(1)

(c) The pie chart shows information about the exports of the company in 2012.

### Exports in 2012

(2)



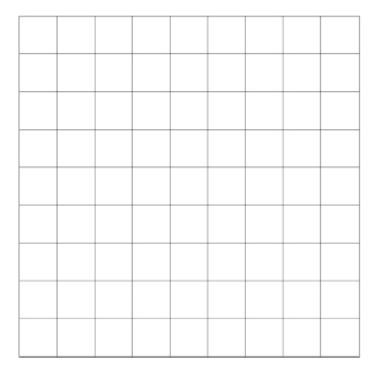
Use <b>both</b> diagrams to work out the value of the exports to the <b>USA</b> in 2012.			
Answer £	million		
	(3)		
	(Total 6 marks)		

Q19.

The table shows information about the birds in a garden.

Bird	Number
Robin	2
Sparrow	5
Wren	3
Lark	1

Draw a bar chart to show the information.



# Q20.

The table shows the proportions of left-handed and right-handed students in a school.

	Left-handed Right-hande	
Boys	15%	85%
Girls	12%	88%

(a)	20 boys and 10 girls are chosen at random from the school.	
	Estimate the number of left-handed students chosen.	
	Δnewer	
	Answer	(3)
(b)	There are an equal number of boys and girls in the school. A student is chosen at random.	
	Work out the probability that the student is right-handed.	
	Answer	
	7 tilettel	(2)
		(Total 5 marks)