

Q1.

Sue has a bag of 18 sweets.

5 of the sweets are blue

7 of the sweets are red

6 of the sweets are green

Sue takes at random a sweet from the bag.

Write down the probability that Sue

(i) takes a red sweet,

.....

(ii) does **not** take a green sweet,

.....

(iii) takes a yellow sweet.

.....

(Total for Question is 3 marks)

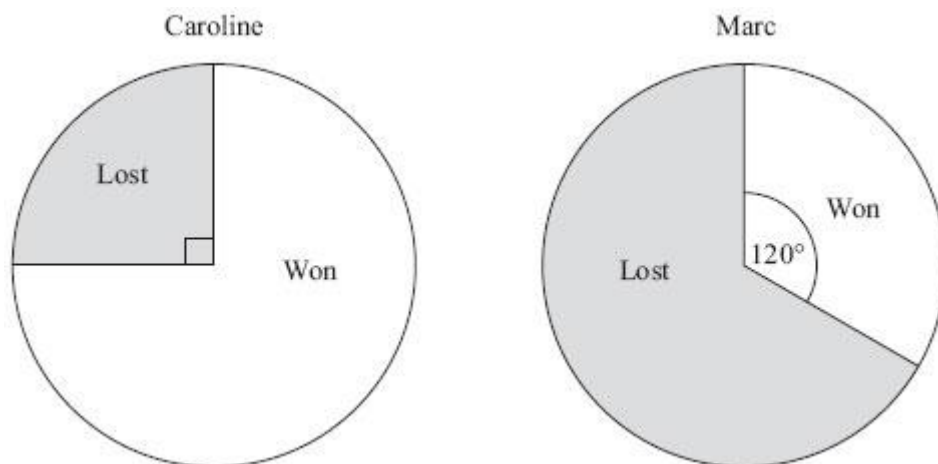
Q1.

Question	Working	Answer	Mark	Notes
(i)		$\frac{7}{18}$	3	B1 for $\frac{7}{18}$ oe
(ii)		$\frac{12}{18}$		B1 for $\frac{12}{18}$ or $\frac{2}{3}$ oe
(iii)		0		B1 for 0 or $\frac{0}{18}$ or zero oe

Q2.

Caroline and Marc are in a darts team.

The pie charts show information about the number of games Caroline and Marc each won last year. They also show information about the number of games Caroline and Marc each lost last year.



Caroline played 52 games.

Marc played 150 games.

Marc won more games than Caroline.

How many more?

(Total for Question is 3 marks)

Q2.

		Working	Answer	Mark	Notes
			11	3	M1 for $52 \times \frac{3}{4}$ (=39) oe or $\frac{120}{360} \times 150$ (=50) oe M1 for $52 \times \frac{3}{4}$ (=39) oe and $\frac{120}{360} \times 150$ (=50) oe A1 cao

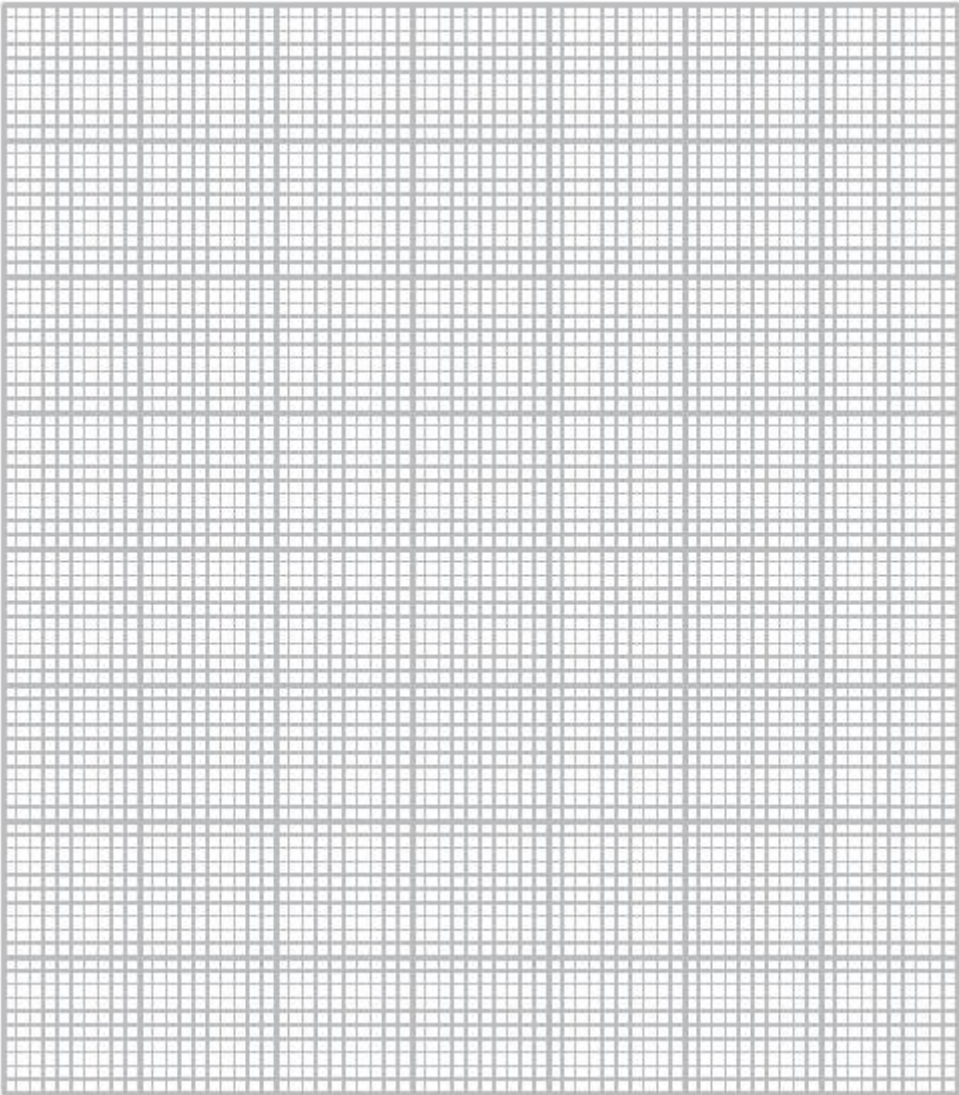
Q3.

Kitty and George sell cars.

The table shows the numbers of cars sold by Kitty and by George in the first four months of 2013

	January	February	March	April
Kitty	2	5	13	10
George	4	7	9	10

Show this information in a suitable diagram.



(Total for Question is 4 marks)

Q3.

		Working	Answer	Mark	Notes
*			diagram or chart	4	B1 for a key or suitable labels to identify Kitty and George B1 for diagram(s) or chart(s) set up for comparison, showing data for at least 3 months, eg dual bar chart, line graph etc B1 for correct heights for Kitty or George, dependent on a linear scale C1 for a fully correct diagram or chart to include 4 months labelled and eg 'cars' or 'frequency' axis correctly scaled and labelled

Q4.

The two-way table shows some information about the numbers of boys, girls and teachers at three schools.

	School A	School B	School C	Total
Boys	85	29	54	
Girls		31	47	171
Teachers	13	5		
Total	191			366

Complete the two-way table.

(Total for Question is 3 marks)

Q4.

		Working	Answer	Mark	Notes
			85 29 54 168 93 31 47 171 13 5 9 27 191 65 110 366	3	B3 for fully correct table (B2 for 3 or 4 or 5 correct entries, B1 for 1 or 2 correct entries)

Q5.

The table gives information about five printers.

Printer	Cost	Wi-fi	Print from a camera	Printing cost per page
Smart	£260	✓	✓	4p
Office	£138		✓	2p
Kanon	£285	✓	✓	5p
Elton	£160	✓		4p
Quikprint	£115		✓	3p

(a) Which printer costs the most?

.....

(1)

(b) Which printers do **not** have wi-fi?

.....

(1)

(c) Which printer has a printing cost per page of 4p **and** can print from a camera?

.....

(1)

(Total for Question is 3 marks)

Q5.

Question	Working	Answer	Mark	Notes
(a)		Kanon	1	B1 cao
(b)		Office, Quikprint	1	B1 cao
(c)		Smart	1	B1 cao

Q6.

Kaz rolled a dice 10 times.

Here are her scores.

- 2 6 5 4 4 2 1 3 4 3

(a) Find the mode.

.....

(1)

(b) Work out the mean.

.....

(2)

(c) Work out the range.

.....

(2)

(Total for Question is 5 marks)

Q6.

Question	Working	Answer	Mark	Notes
(a)		4	1	B1 cao
(b)	$34 \div 10$	3.4	2	M1 for attempt to sum all values and divide by 10 or $34 \div 10$ A1 3.4, $3\frac{4}{10}$, $3\frac{2}{5}$
(c)		5	2	M1 for $6 - 1$ or $1 - 6$, or -5 A1 cao

Q7.

Here is the number of goals a hockey team scored in each of 10 matches.

3 4 3 2 5 3 5 6 2 4

Find

(i) the median

.....

(ii) the range

.....

(iii) the mean

.....

(Total for Question is 6 marks)

Q7.

	Working	Answer	Mark	Notes
(i)	2 2 3 3 3 4 4 5 5 6 ↑	3.5	6	M1 for ordering the data condone one extra or one omission A1 for 3.5 or $3\frac{1}{2}$
(ii)		4		M1 for $6 - 2$ or $2 - 6$ A1 cao
(iii)		3.7		M1 for $(2+2+3+3+3+4+4+5+5+6) \div 10$ condone missing brackets or $37 \div 10$ A1 for 3.7 or $3\frac{7}{10}$ [SC B1 for 31.6 or 33.4]

Q8.

The table shows some information about the amounts of time, in minutes, that Dave and Nick spent using their mobile phones on four days last week.

	Time (minutes)	
	Dave	Nick
Thursday	7	6
Friday	6	11
Saturday	17	12
Sunday	28	35

Nick spent less than 10 minutes using his mobile phone on one of these four days.

(a) Which day?

.....

(1)

On Sunday Nick spent more time using his mobile phone than Dave.

(b) How much more time?

.....

(1)

*(c) Work out who spent the greater total amount of time using his mobile phone.
You must show all your working.

(3)

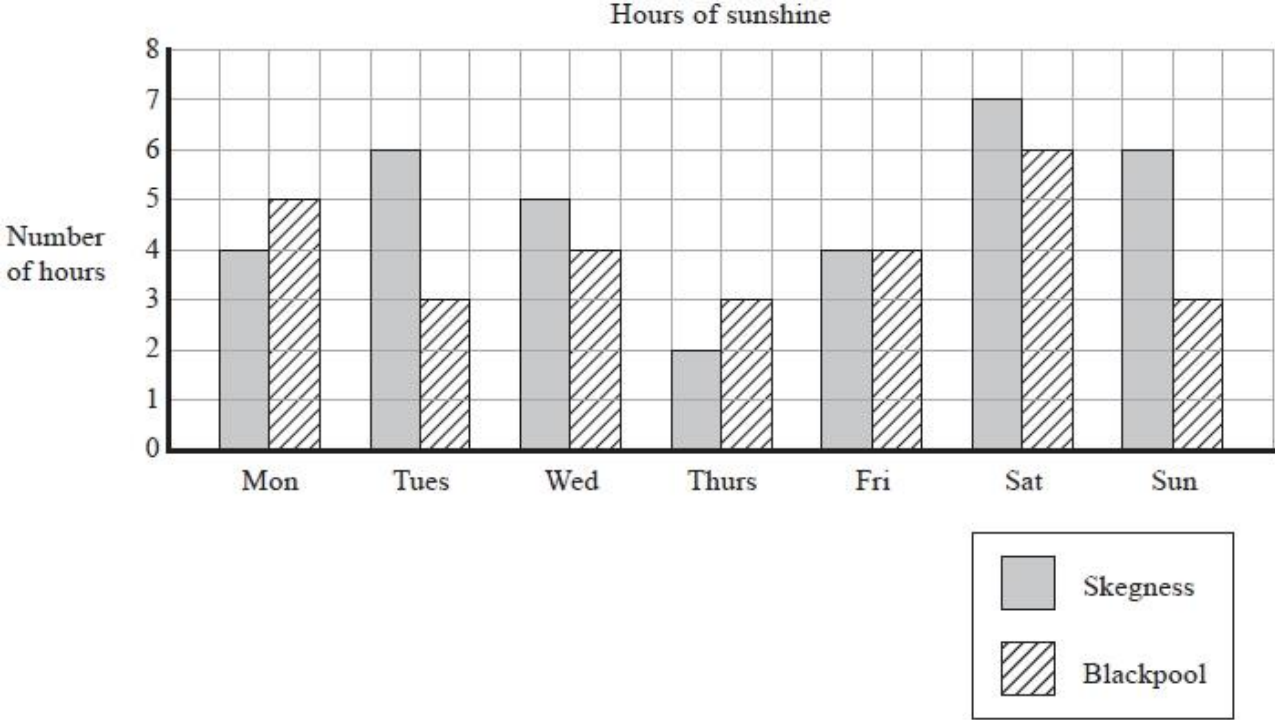
(Total for Question is 5 marks)

Q8.

	Working	Answer	Mark	Notes
(a)		Thursday	1	B1 cao
(b)		7	1	B1 cao
*(c)		Nick	3	<p>M1 for the intention to add Dave's 4 times or Nick's 4 times A1 for 58 and 64 C1 (dep on M1 and two totals) for clearly stating Nick as their answer or ft from their two totals</p> <p>OR</p> <p>M1 for the intention to find the difference between the times on each of the 4 days A1 for 6 or -6 C1 (dep on M1 and a net difference) for clearly stating Nick as their answer or ft from their difference</p> <p>[SC: B1 for "Nick spent 6 minutes more than Dave on his phone" if M0 scored.]</p>

Q10.

The bar chart shows the number of hours of sunshine each day last week in Skegness and in Blackpool.



(a) How many hours of sunshine did Skegness have on Wednesday?

..... hours
(1)

(b) Blackpool had 6 hours of sunshine one day.
Which day?

.....
(1)

(c) In total, Skegness had more hours of sunshine than Blackpool last week.
How many hours more?

..... hours
(2)

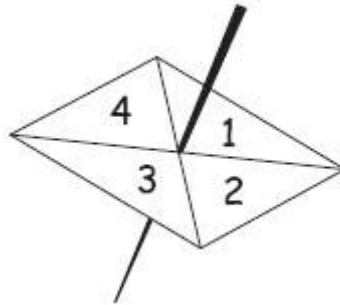
(Total for Question is 4 marks)

Q10.

PAPER: IMA0_2F				
Question	Working	Answer	Mark	Notes
(a)		5	1	B1 cao
(b)		Saturday	1	B1 cao
(c)	$4+6+5+2+4+7+6 = 34$ $5+3+4+3+4+6+3 = 28$ $34 - 28$ $-1 + 3 + 1 + -1 + 0 + 1 + 3$	6	2	M1 for intention to find the total hours for Skegness or for Blackpool. A1 cao OR M1 for intention to find differences for each day. A1 cao

Q11.

Here is a four sided spinner.
The spinner is biased.



The table shows the probabilities that the spinner will land on 1 or on 3

Number	1	2	3	4
Probability	0.2		0.1	

The probability that the spinner will land on 2 is the same as the probability that the spinner will land on 4
(a) Work out the probability that the spinner will land on 4

.....

(3)

Shunya is going to spin the spinner 200 times.

(b) Work out an estimate for the number of times the spinner will land on 3

.....

(2)

(Total for Question is 5 marks)

Q11.

	Working	Answer	Mark	Notes
(a)	$1 - 0.2 - 0.1$ $0.7 \div 2$	0.35	3	M1 for correctly using total probability 1 or 100% if percentages used M1 (dep) for complete correct method to complete the solution A1 for 0.35 or 35% or $\frac{35}{100}$ oe
(b)	0.1×200	20	2	M1 for 0.1×200 A1 cao [SC: B1 for an answer of $\frac{20}{200}$ if M0 scored]