Q1.
Here are seven numbers.

13	6	12	7	6	4	8

(a)   Work out the range of the seven numbers.

Circle your answer.

5	6	7	8	9

(1)

(b)   What is the mode of the seven numbers?

Circle your answer.

5	6	7	8	9

(1)
(Total 2 marks)

Q2.
Here is information about the scores, t, of class A in a test.

Score	Frequency		
$0 < t \le 10$	4		
$10 < t \le 20$	8		
$20 < t \le 30$	9		
$30 < t \le 40$	3		
$40 < t \le 50$	1		

The mean score for class B in the same test is 22

Dan says,

"On average, class A did better than class B."

Is he correct?
You **must** show your working.

....

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Answer ....

(Total 4 marks)

Q3. The tables show two sets of data.

Set A

Result	Frequency
2	3
3	7
4	8
5	7
6	9
7	1

Set B

Result	Frequency
3	3
4	12
5	9
6	8

(a)   Liam says,

"Set A has the higher mode."

Is he correct?
You **must** show your working.

....

....

(2)

(b)   Liam says,

        "Set A has the larger range."

        Is he correct?
        You **must** show your working.

        ....

        ....

(2)
(Total 4 marks)

Q4. A, B and C are sets of three cards.

(a)   Set B has the same **total** as Set A.
        Set B has the same **median** as Set A.

        Complete the cards in Set B.

        Set A | 12 | | 18 | | 15 |

        Set B | 20 | | | | |

(2)

(b)   Set C has the same **total** as Set A.
        Set C has the same **range** as Set A.

        Complete the cards in Set C.

| Set A | 12 | 18 | 15 |

| Set C | 17 | | |

(2)
(Total 4 marks)

Q5. 50 cars arrive at a car park.
The table shows the number of people in each car.

Number of people	Number of cars
1	9
2	12
3	18
4	7
5	4

(a)   One of the cars is chosen at random.

Work out the probability that there are **more than 3** people in the car.

....

....

Answer ....

(2)

(b)   Work out the total number of people in the 50 cars.

....

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Answer ....

(2)
(Total 4 marks)

Q6.

Lilly rolls four ordinary six-sided dice.

She records the numbers rolled.

The mode of the numbers is one more than the median.

Work out a possible set of four numbers she could have rolled.

....

....

Answer ....

(Total 2 marks)

Q7.

(a)   Lilly rolls four ordinary six-sided dice.

She records the numbers rolled.

The mode of the numbers is one more than the median.

Work out a possible set of four numbers she could have rolled.

....

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Answer ....

(2)

(b)   Meg has one ordinary six-sided dice.
She rolls it 50 times and records each score in this table.

Score	Frequency	
1	10	
2	7	
3	9	
4	5	
5	8	
6	11	

Work out the mean score.

....

....

....

Answer ....

(3)
(Total 5 marks)

Q8. Adam saved these amounts.

£124   £79.50   £122.50   £96   £85

(a)   Work out the range.

....

....

Answer £ ....

(2)

(b)   Matthew saved **half** as much as Adam.

Work out the **total** amount that Matthew saved.

....

....

....

....

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....

Answer £ ....

(3)
(Total 5 marks)

Q9.A bag has 12 counters.

They are pink (P), white (W), green (G) or yellow (Y).

P W G Y

G P P Y

P W G Y

One counter is taken from the bag.
A new counter is then added to the bag.

The mode is now yellow.

(a)   What colour counter was taken out?
       Circle your answer.

           Pink   White   Green   Yellow

(1)

(b)   What colour counter was added?
       Circle your answer.

           Pink   White   Green   Yellow

(1)
(Total 2 marks)

Q10. Here is some information about tourism in 2012

Country visited	Number of tourists (millions)	Total spent by tourists ($ millions)
France	83.0	53 600
USA	67.0	126 200
Spain	57.7	55 900

(a)   How many **more** tourists visited France than Spain?

....

Answer .... million

(2)

(b)   21% of the total spent by tourists in the USA was by Canadians.

Work out the amount spent by Canadian tourists in the USA.

....

....

....

....

Answer $ .... million

(2)

(c)   In the UK the total spent by tourists was $36 600 million.
There were 29.3 million tourists.

Work out the average spent per tourist in the UK.
Give your answer to the nearest $10

....

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Answer $ ....

(3)
(Total 7 marks)

Q11. I am thinking of three positive numbers.

The mode is 5

The median is 5

The range is 9

Work out the three numbers.

Answer .... , ... , ...

(Total 2 marks)

Q12. Here are the marks of a student in four exams.

65   80   76   69

The student takes a fifth exam.
His mean mark for the five exams is 70

Work out his mark in the **fifth** exam.

....

....

....

Answer ....

(Total 3 marks)

Q13. Here are five numbers.

| 5 | 9 | 10 | 7 | 9 |

(a)   What is the mode?

....

Answer ....

(1)

(b)   Show clearly that the median is 9.

....

....

(1)
(Total 2 marks)

Q14. Here are two sets of cards.

Set A   4   7   6   X

Set B   2   5   1   X

X has the same value on both cards.
Each set of cards has a range of 4.

Work out the value of X.

....

....

....

Answer ....

1

Q15. Put the numbers 1, 2 or 3 on each card so that

- each number is used at least once
- the mode of the numbers is 2.

[ ] [ ] [ ] [ ] [ ]

(Total 2 marks)

Q16.

Mrs Shah buys pepper plants.

Here are the numbers of peppers she grows from 10 plants.

| 10 | 13 | 11 | 10 | 12 | 15 | 13 | 12 | 11 | 10 |

(a)   Work out the median.

....

Answer ....

(2)

(b)   Work out the mean.

....

....

....

Answer ....

(3)

(c)   Mrs Shah buys some more pepper plants.
She says,

"On average, I should get about 12 peppers from each plant."

Give a reason why her data shows she is correct.

....

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(1)
(Total 6 marks)