Questions

Q1.

The table below shows some information about the number of times each student in a class was late last week.

Lates	Frequency
0	15
1	8
2	3
3	3
4	1

Work out the mean number of lates per student.

.....

(Total for question = 3 marks)

Q2.

The table gives information about the speeds of 75 cars on a road.

Speed (*s* km/h)	**Frequency**		
$30 \leq s$	7		
$40 \leq s$	22		
$50 \leq s$	34		
$60 \leq s$	12		

Work out an estimate for the mean speed.

. . . . . km/h

(Total for Question is 4 marks)

Q3.

The table gives information about the heights of 50 trees.

Height (h metres)	Frequency
$0 < h \leqslant 4$	8
$4 < h \leqslant 8$	21
$8 < h \leqslant 12$	12
$12 < h \leqslant 16$	7
$16 < h \leqslant 20$	2

Work out an estimate for the mean height of the trees.

..... m

(Total for question = 4 marks)

Q4.

Faisel weighed 50 pumpkins.

The grouped frequency table gives some information about the weights of the pumpkins.

Weight (w kilograms)	**Frequency**
$0 < w \leq 4$	11
$4 < w \leq 8$	23
$8 < w \leq 12$	14
$12 < w \leq 16$	2

Work out an estimate for the mean weight.

.....

(Total for Question is 4 marks)

Q5.

Alice is a lorry driver.

She recorded the distance she drove on each of 40 trips.

The table gives information about these distances.

Distance (d miles)	Frequency
$400 < d \leqslant 450$	9
$450 < d \leqslant 500$	15
$500 < d \leqslant 550$	12
$550 < d \leqslant 600$	4

Work out an estimate for the mean distance.

..... miles

(Total for Question is 4 marks)

Q6.

The table gives information about the heights of 35 girls.

Height (h metres)	Frequency
$1.30 \leqslant h < 1.40$	11
$1.40 \leqslant h < 1.50$	9
$1.50 \leqslant h < 1.60$	7
$1.60 \leqslant h < 1.70$	6
$1.70 \leqslant h < 1.80$	2

(a) Find the class interval that contains the median.

.....

(1)

(b) Work out an estimate for the mean height.

..... m

(4)

(Total for question = 5 marks)

Q7.

Jenny works in a shop that sells belts.

The table shows information about the waist sizes of 50 customers who bought belts from the shop in May.

Belt size	Waist (w inches)	Frequency
Small	$28 < w \leqslant 32$	24
Medium	$32 < w \leqslant 36$	12
Large	$36 < w \leqslant 40$	8
Extra Large	$40 < w \leqslant 44$	6

(a) Calculate an estimate for the mean waist size.

..... inches

(3)

Belts are made in sizes Small, Medium, Large and Extra Large.

Jenny needs to order more belts in June.
The modal size of belts sold is Small.

Jenny is going to order $\frac{3}{4}$ of the belts in size Small.

The manager of the shop tells Jenny she should **not** order so many Small belts.

(b) Who is correct, Jenny or the manager?
You must give a reason for your answer.

.....

.....

(2)

(Total for question is 5 marks)

Q8.

The table shows information about the number of years 41 teachers have each taught at a school.

Number of years (n)	Number of teachers		
$0 < n \leqslant 10$	14		
$10 < n \leqslant 20$	13		
$20 < n \leqslant 30$	8		
$30 < n \leqslant 40$	4		
$40 < n \leqslant 50$	2		

(a) Write down the class interval that contains the median.

.....

(2)

(b) Calculate an estimate for the mean number of years.
You must show all your working.

.....

(4)

(Total for question = 6 marks)

Q9.

The table gives information about the numbers of badges gained by the younger girls in a Guide group.

Number of badges	Frequency
0	2
1	8
2	4
3	3
4	5
5	3

(a) Write down the mode.

.....

(1)

(b) Work out the mean number of badges gained by these girls.

.....

(3)

There are 15 older girls in the Guide group.
The mean number of badges gained by these 15 older girls is 4.4

(c) Work out the mean number of badges gained by all the girls in the Guide group.

.....

(3)

(Total for question = 7 marks)