Estimating the mean

1. The table below shows the time it takes to get to school in minutes.

Time (minutes)	Frequency		
$0 \leq t < 10$	12		
$10 \leq t < 20$	14		
$20 \leq t < 40$	8		
$40 \leq t < 60$	6		

Find an estimate for the mean.

(4 marks)

2. The table below shows the height, in cm, of 50 students in year 9.

Height (cm)	Frequency		
$100 \leq h < 110$	7		
$110 \leq h < 120$	18		
$120 \leq h < 40$	13		
$140 \leq h < 160$	8		
$160 \leq h < 170$	4		

Find an estimate for the mean.

(4 marks)

Estimating the mean

3. The table below shows the age (in years) off the first 100 people in a bus station.

Age (years)	Frequency		
$0 \leq a < 20$	26		
$20 \leq a < 40$	31		
$40 \leq a < 60$	23		
$60 \leq a < 100$	20		

Find an estimate for the mean.

(4 marks)

4. The table below shows the time it takes for students to finish their Maths test.

Time (minutes)	Frequency
$0 \leq t < 10$	7
$10 \leq t < 20$	17
$20 \leq t < 30$	22
$30 \leq t < 40$	25
$40 \leq t < 60$	19

Find an estimate for the mean.

(4 marks)

Estimating the mean

5. The table below shows the weight (in kg) of 60 people.

Weight (kg)	Frequency
$50 \leq w < 60$	7
$60 \leq w < 70$	14
$70 \leq w < 80$	18
$80 \leq w < 90$	12
$100 \leq w < 110$	9

Find an estimate for the mean.

(4 marks)

6. The table below shows the amount of money (in £s) people spend on their lunch each day.

Amount (£)	Frequency
$0 \leq £ < 3$	14
$3 \leq £ < 5$	13
$5 \leq £ < 8$	11
$8 \leq £ < 10$	9
$10 \leq £ < 15$	3

Find an estimate for the mean.

(4 marks)

Estimating the mean

7. The amount of time students watch TV on a school night is shown in the table below.

Time (minutes)	Frequency		
$0 \leq t < 20$	12		
$20 \leq t < 40$	28		
$40 \leq t < 60$	30		
$60 \leq t < 90$	19		
$90 \leq t < 120$	11		

a) Find the modal interval.

(1 mark)

b) Find an estimate for the mean.

(4 marks)

c) What fraction of students watched less than an hour worth of TV?

(2 marks)

Estimating the mean

8. The speed of 80 cars on a racetrack was measured in mph.
The table below shows the data.

Speed (mph)	Frequency
$0 \leq t < 30$	8
$30 \leq t < 50$	23
$50 \leq t < 70$	22
$70 \leq t < 100$	27

a) Find the median interval.

(2 marks)

b) Find an estimate for the mean.

(3 marks)

c) What fraction of cars drove less than 50mph?

(2 marks)

Estimating the mean

9. The speed of 60 vehicles was measured on a road.

Speed (mph)	Frequency
$0 \leq t < 30$	8
$30 \leq t < 50$	23
$50 \leq t < 70$	22
$70 \leq t < 100$	27

a) Find the median interval.

(2 marks)

b) Find an estimate for the mean.

(3 marks)

c) What fraction of cars drove less than 50mph?

(2 marks)