1. Amanda collected 20 leaves and wrote down their lengths, in cm.

Here are her results.



(a) Complete the frequency table to show Amanda's results.

Length in cm	Tally	Frequency
2	1	
3	1	1
4	711	4
5	JHT I	6
6	\mathred{III}	3
7	[11]	3
8	1)	2

(4 marks)

(2)

2. Rosie had 10 boxes of drawing pins.

She counted the number of drawing pins in each box.

The table gives information about her results.

Number of drawing pins	Frequency	
29	2	58
30	5	150
31	2	62
32	1	32

302 710

Work out the mean number of drawing pins in a box.

30 . Z (3 marks) 3. Andy did a survey of the number of cups of coffee some pupils in his school had drunk yesterday.

The frequency table shows his results.

Number of cups of coffee	Frequency	
2	1	2
3	3	9
4	5	20
5	8	40 30
6	5	30

(a) Work out the number of pupils that Andy asked.

4,59 (2dp)

(5 marks)

(b) Work out the mean number of cups of coffee drunk.

4. 20 students scored goals for the school hockey team last month. The table gives information about the number of goals they scored.

Goals scored	Number of students	:
1	9	9
2	3	6
3	5	15
4	3	12
	0.01	1

(a) Write down the modal number of goals scored.

.....(1)

(b) Work out the range of the number of goals scored.

3_____(1)

(c) Work out the mean number of goals scored.

42 = 20

2.1

(5 marks)

5. Bob asked each of 40 friends how many minutes they took to get to work.

The table shows some information about his results.

Time taken (m minutes)	Frequency	mid point	midpoint*f		
$0 < m \le 10$	3	5	15		
$10 < m \le 20$	8	15	120		
$20 < m \le 30$	11	25	275		
$30 < m \le 40$	9	3 <i>5</i>	315		
$40 < m \le 50$	9	45	405		

a) Work out an estimate for the mean time taken.

28,25 minutes (4)

b) State the modal class interval

20 < m < 30 (1)

c) Find the group containing the median

(7 marks)

6. The table shows information about the numbers of hours 40 children watched television one evening.

Number of hours (h)		Frequency
0 ≤ <i>h</i> ≤ 1	0.5	3
$1 \leqslant h \leq 2$	1.5	8
$2 \leqslant h \leqslant 3$	2.5	7
$3 \leqslant h \leqslant 4$	3.5	10
$4 \leqslant h \leqslant 5$	4.5	12

1,5 12 17.5 35 54

120

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

(1)

3644

(b) Work out an estimate for the mean number of hours.

(4)

120

hours (5 marks)

7. 80 people work in Jenny's factory.

The table shows some information about the annual pay of these 80 workers.

Annual pay (£x)	Number of workers	M.P	M.Pxf
$10\ 000 < x \le 14\ 000$	32	12000	384000
$14\ 000 < x \le 16\ 000$	24		360 000
$16\ 000 < x \le 18\ 000$	16	17000	272 000
$18\ 000 < x \le 20\ 000$	6	19000	114000
$20\ 000 < x \le 40\ 000$	2	30000	60000

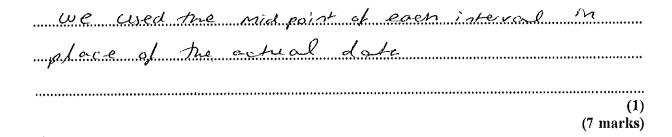
(a)	Write	down	the	modal	class	interva	(
(a)	write	GOWII	me	modai	Class	mierva	ŀ.

1190000

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

(c) Work out an estimate for the mean annual pay.

(d) Why is your answer to part (c) and estimate?



8. Caleb measured the heights of 30 plants. The table gives some information about the heights, h cm, of the plants.

Height (h cm) of plants	Frequency	M.p	mp.xf
$0 < h \le 10$	2	5	10
10 < h ≤ 20	8	15	120
$20 < h \le 30$	9	25	225
$30 < h \le 40$	7	35	245
$40 < h \le 50$	4	45	180

(a)	Work out an estimate for the mean height of a plant. 7 80 ÷ 3 0	26
(b)) Write down the modal class interval.	
(c)	Find the class interval that contains the median.	∠h≤30 (1)
	I) Why is your answer to part (a) and estimate? (as a proxy for	< h < 30 (2)
	actual data.	
••••		(1) (7 marks)

9. Marcus collected some pebbles. He weighed each pebble.

The grouped frequency table gives some information about weights.

Weight (w grams)	Frequency	M.P	n.pxf
$50 \le w < 60$	5	55	275
60 ≤ w < 70	9	65	585
$70 \le w < 80$	22	75	1650
$80 \le w < 90$	27	85	2295
$90 \le w < 100$	17	95	1615

(a)	Work out ar	ı estimate	for the	mean	weight	of the	pebbles
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6420-80 80.25

(b) Write down the modal class interval.

802490

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

80 \ \ \ \ \ \ \ \ \ \ \ (2)

(d) Why is your answer to part (a) and estimate?

actual data we do not know the

(7 marks)