WorkSHEET 12.3 Summary statistics

Name: _____

1 Find the mean of the data sets below.

(a) 19, 38, 26, 91, 87

(b)

Score	Frequency
5	2
6	5
7	8
8	12
9	9
10	6

2 Find the median of the data sets below.

(a) 16, 25, 45, 14, 15, 38

(b) 95, 87, 52, 45, 56, 74, 26

3 The number of minutes late that a certain train runs each day over a four-week period is recorded below.

4	2	1	0	3	5	1
2	3	4	0	2	0	1
1	2	4	0	0	1	2
0	1	3	2	0	1	0

(a) Record the results in a frequency table.

(b) Use the table the find the mean number of minutes late that the train runs.

(c) Find the mode number of minutes late that the train runs.

4 For the frequency table below

Class	**Class centre**	**Frequency**	$f \times x$
1–10		5	
11–20		8	
21–30		20	
31–40		10	
41–50		7	
		$\Sigma f = 50$	$\Sigma f \times x =$

(a) Complete the frequency table.

(b) State the modal class.

(c) Use the table to estimate the mean.

5 For the frequency table below

Class	**Class centre**	**Frequency**	$f \times x$
1–4		6	
5–8		26	
9–12		43	
13–16		15	
17–20		10	
		$\Sigma f =$	$\Sigma f \times x =$

(a) Complete the frequency table.

(b) State the modal class.

(c) Use the table to estimate the mean.

6 Complete the cumulative frequency column in the table below and use it to find the median of the distribution.

Score	**Frequency**	**Cumulative frequency**
1	9	
2	6	
3	4	
4	3	
5	3	

7 Complete the cumulative frequency column in the table below and use it to find the median of the distribution.

Score	**Frequency**	**Cumulative frequency**
6	4	
7	11	
8	15	
9	21	
10	9	

8 The data below shows the number of days each student in a class was absent from school during a term.

Days absent	**Frequency**	**Cumulative frequency**
0	6	
1	16	
2	4	
3	3	
4	1	

(a) Copy and complete the table.

(b) Draw a cumulative frequency histogram and polygon of the data.

(c) Use the ogive to find the median of the data.

9 The data below shows the marks each student in the class achieved in their Maths exam.

Mark	**Class centre**	**Freq**	**Cumulative frequency**
51–60	55.5	5	
61–70	65.5	3	
71–80	75.5	9	
81–90	85.5	6	
91–100	95.5	7	

(a) Copy and complete the table.

(b) Draw a cumulative frequency histogram and polygon of the data.

(c) Use the ogive to find the median of the data.

10 The scores below represent the number of attempts that 20 drivers took to get their licences.

3 2 4 1 1 3 2 4 2 2
2 1 1 4 2 1 2 1 1 1

(a) Represent the results in a frequency table including a cumulative frequency column.

(b) Use the table to find the mean.

(c) Find the median of the distribution.