UNIT 5 Data Analysis

Revision Test 5.1

(Standard)

1. Calculate the *mean*, *median*, *mode* and *range* of this data set:

(7 *marks*)

2. Calculate the *median* of this set of data:

(2 marks)

3. The scores obtained by a class of children in a test are listed below:

(a) Copy and complete the following tally chart:

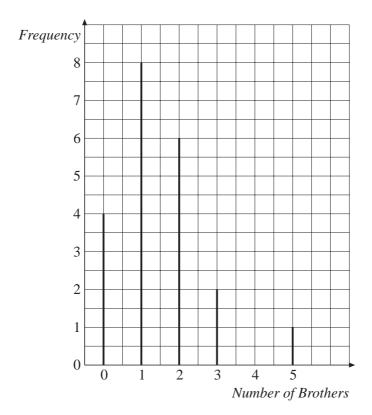
Score	Tally	Frequency
0		
1		
2		
3		
4		
5		

- (b) Draw a pie chart to illustrate this data.
- (c) Draw a vertical line graph to illustrate this data.

(16 marks)

Revision Test 5.1

4. The vertical line graph below gives information on the number of brothers that the children in one class have.



- (a) What is the *mode* of the data?
- (b) How many children have 3 brothers?
- (c) How many children do *not* have brothers?
- (d) How many children are there in the class?

(5 marks)

UNIT 5 Data Analysis

Revision Test 5.2

(Academic)

1. Calculate the *mean*, *median*, *mode* and *range* of this data set:

(7 *marks*)

2. (a) Calculate the *mean*, *median*, *mode* and *range* of the data given in the table below:

Number of Cars	Frequency	Number × Frequency
1	1	
2	5	
3	6	
4	8	
5	7	
6	3	

- (b) Draw a pie chart to illustrate the data in the table.
- (c) Draw a vertical line graph to illustrate the data in the table.

(21 marks)

3. Calculate the *median* of the following set of data:

(2 marks)

UNIT 5 Data Analysis

Revision Test 5.3

(Express)

1. Calculate the *mean*, *median*, *mode* and *range* of this data set:

(7 marks)

2. (a) Calculate the *mean*, *median*, *mode* and *range* of the data given in the table below:

Score	Frequency
11	3
12	2
13	8
14	10
15	5
16	9
17	2
18	1

- (b) Draw a pie chart to illustrate the data in the table.
- (c) Draw a vertical line graph to illustrate the data in the table.

(21 marks)

3. The mean of five numbers is 18. If four of the numbers are 6, 12, 18 and 20, what is the other number?

(2 marks)

Revision Test 5.1 (Standard)

Answers

1. Mean
$$=\frac{30}{5}=6$$

M1 A1

Median = 7

B2

Mode = 7

B1

Range = 8 - 2 = 6

M1 A1

(7 marks)

2. (b) Median =
$$\frac{4+6}{2} = 5$$

M1 A1

(2 marks)

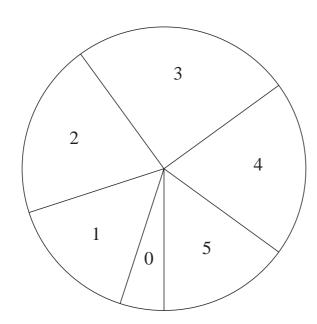
3. (a)

Score	Tally	Frequency		
0	I	1		
1	111	3		
2	1111	4		
3	HH1	5		
4	1111	4		
5	111	3		

(-1 for each B5 mistake)

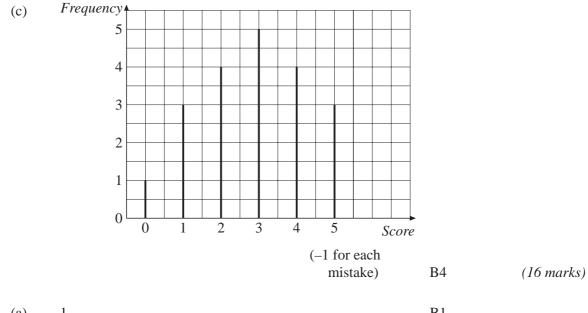
Score	0	1	2	3	4	5
Angle	18 °	54 °	72 °	90°	72 °	54 °

(-1 for each mistake) M1 A3



M1 A2

Revision Test 5.1 Answers



B1 4. (a) 1

(b) 2 B1

(c) B1

4 + 8 + 6 + 2 + 1 = 21(d) M1 A1 (5 marks)

(TOTAL MARKS 30)

Revision Test 5.2 (Academic)

Answers

1. Mean
$$=\frac{68}{5} = 13.6$$

M1 A1 A1

Median = 13

B1

Mode = 22

B1

Range = 22 - 5 = 17

M1 A1 (7 marks)

2. (a) Mean =
$$\frac{1 \times 1 + 2 \times 5 + 3 \times 6 + 4 \times 8 + 5 \times 7 + 6 \times 3}{30}$$

M2 A2

$$= \frac{114}{30} = 3.8$$

M1 A1

Median = 4

B2

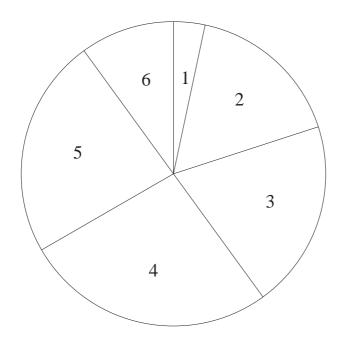
Mode = 4

B1

Range =
$$6 - 1 = 5$$

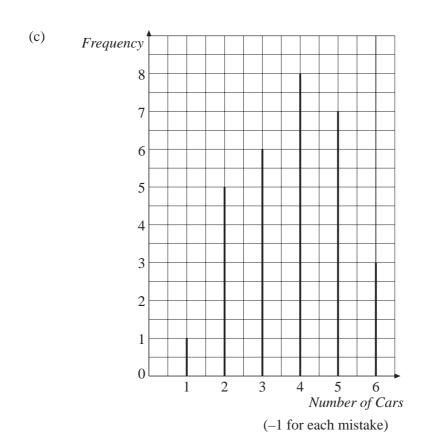
M1 A1

(-1 for each mistake) M1 A3



M1 A2

Revision Test 5.2 Answers



B3

3.
$$\frac{6+7}{2} = 6.5$$
 M1 A1 (2 marks)

(TOTAL MARKS 30)

(21 marks)

Revision Test 5.3 (Express)

Answers

1. Mean
$$=\frac{200}{8}=25$$

M1 A1

Median =
$$\frac{20 + 23}{2} = 21.5$$

M1 A1

$$Mode = 37$$

B1

Range =
$$41 - 11 = 30$$

M1 A1

(7 marks)

2. (a) Mean =
$$\frac{3 \times 11 + 2 \times 12 + 8 \times 13 + 10 \times 14 + 5 \times 15 + 9 \times 16 + 2 \times 17 + 1 \times 18}{40}$$

M2 A1

$$= \frac{572}{40}$$

M1 A1

$$= 14.3$$

A1

$$Median = 14$$

M1 A1

Mode
$$= 14$$

B1

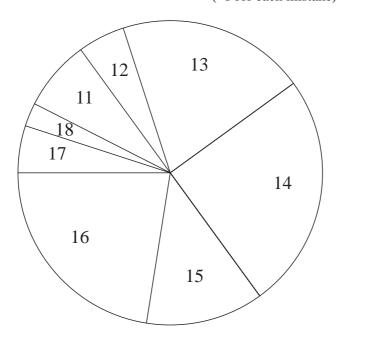
Range =
$$18 - 11 = 7$$

M1 A1

(b)	Score	11	12	13	14	15	16	17	18
	Angle	27 °	18°	72 °	90°	45 °	81°	18°	9°

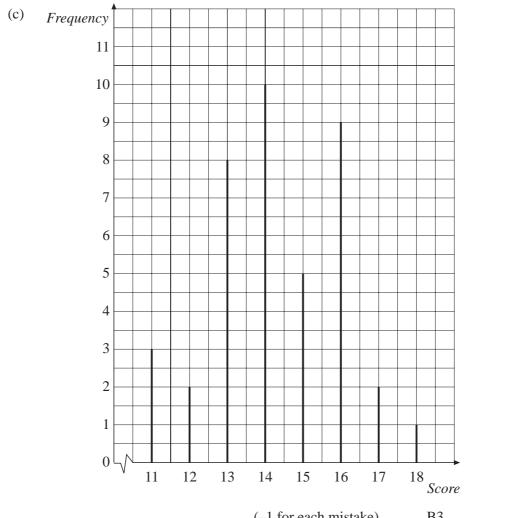
(-1 for each mistake)

M1 A3



M1 A2

Revision Test 5.3 Answers



(-1 for each mistake) B3 (21 marks)

3.
$$6 + 12 + 18 + 20 = 56$$

$$5 \times 18 = 90$$

$$90 - 56 = 34$$

M1 A1

(2 marks)

(TOTAL MARKS 30)