GCSE FOUNDATION · REVISION MAT 5

Stem-and-leaf diagrams

1 The stem-and-leaf diagram shows some test scores.

3	1 5 8
4	2 4 4 7
5	1 6 8
6	3

Key: 3 | 1 means 31

(a) Find the median.

(b) Find the range.

2 Here are some times, in minutes.

71, 64, 58, 77, 69, 62, 80, 73, 66, 59

Draw an ordered stem-and-leaf diagram. Include a key.

3 The stem-and-leaf diagram shows some test scores.

3	1 5 8
4	2 4 4 7
5	1 6 8
6	3

Key: 3 | 1 means 31

Finn says the highest score is 3.

Explain why Finn is wrong.

4 The stem-and-leaf diagram shows some test scores.

3	1 5 8
4	2 4 4 7
5	1 6 8
6	3

Key: 3 | 1 means 31

Show that the mode is 44.

5 The diagram shows the scores of group A.

3	1 5 8
4	2 4 4 7
5	1 6 8
6	3

Key: 3 | 1 means 31

Group B has a median of 48 and a range of 26.

Compare the two groups.

6 The stem-and-leaf diagram shows some test scores.

3	1 5 8
4	2 4 4 7
5	1 6 8
6	3

Key: 3 | 1 means 31

What percentage of the scores are more than 50? Give your answer to the nearest whole number.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Stem-and-leaf diagrams

1 (a) 11 values, middle is value 6: **44**

(b) 63 – 31 = **32**

2

5	8 9
6	2 4 6 9
7	1 3 7
8	0

Key: 5 | 8 means 58

3 Finn has read only the leaf. The stem gives the tens.

Highest score = **63**

4 **44** appears twice; every other value appears once ✓

5 Group A: median 44, range 32

Group **B** has the higher median, so did better on average.
Group **B** has the smaller range, so is more consistent.

6 4 out of 11

4 ÷ 11 × 100 = **36%**