GCSE FOUNDATION · REVISION MAT 4

Stem-and-leaf diagrams

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

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

Key: 0 | 5 means 5

(a) Find the median.

(b) Find the range.

2 Here are some times, in minutes.

13, 27, 9, 22, 18, 31, 25, 16, 20, 11

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

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

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

Key: 0 | 5 means 5

Ella says the highest score is 6.

Explain why Ella is wrong.

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

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

Key: 0 | 5 means 5

Show that the mode is 18.

5 The diagram shows the scores of group A.

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

Key: 0 | 5 means 5

Group B has a median of 20 and a range of 25.

Compare the two groups.

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

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

Key: 0 | 5 means 5

What percentage of the scores are more than 20? Give your answer to the nearest whole number.

Mr&Mrs MATHS

1 (a) 11 values, middle is value 6: **18**

(b) 36 – 5 = **31**

2

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

Key: 0 | 9 means 9

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

Highest score = **36**

ANSWERS · REVISION MAT 4

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4 **18** appears twice; every other value appears once ✓

5 Group A: median 18, range 31

Group **B** has the higher median, so did better on average.

Group **B** has the smaller range, so is more consistent.

6 5 out of 11

5 ÷ 11 × 100 = **45%**