GCSE HIGHER · REVISION MAT 5

Comparing and interpreting data

1 Shop A: mean daily sales £520, range £300.

Shop B: mean £480, range £90.

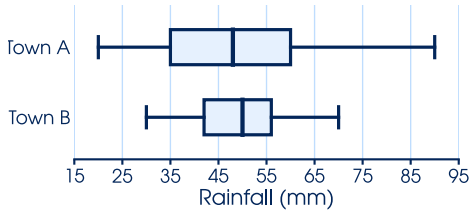
Compare the shops.

2 Pocket money: £5, £6, £6, £7, £8, £50.

Which average best represents it? Explain.

3 Explain why a sample mean is only an estimate of the population mean.

4 Compare the rainfall.



5 Explain one way to reduce bias in a survey.

6 In a sample of 200 voters, 86 support a plan.

Estimate the number of supporters among 45 000 voters.

7 Explain why the mode is useful for non-numerical data.

8 Group P: 20 people, mean 15.

Group Q: 30 people, mean 20.

Find the overall mean and say which group pulls it more.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Comparing and interpreting data

1 A sells more on average.

B's sales are more consistent.

2 The median (£6.50): £50 is an outlier.

3 The sample is only part of the population, so it may differ by chance.

4 Similar medians (48 vs 50).

B more consistent (IQR 14 vs 25).

5 Use a random (or stratified) sample, and ask neutral questions.

6 $\frac{86}{200} \times 45\,000$

19 350

7 It is the only average that can be found for categories, e.g. favourite colour.

8 $\frac{300 + 600}{50} = 18$

18; Q pulls it more (it is larger).