GCSE HIGHER · REVISION MAT 2

Comparing and interpreting data

1 Team A: median 23 points, IQR 10.

Team B: median 19 points, IQR 4.

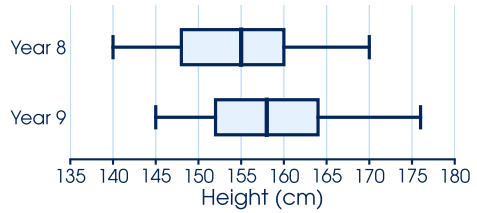
Compare the teams.

2 House prices: £150k, £160k, £165k, £170k, £600k.

Which average should an estate agent use? Explain.

3 Explain what a large interquartile range tells you.

4 Compare the heights.



5 Explain why a survey with 500 responses is more reliable than one with 50.

6 In a sample of 80 cars, 12 were red.

Estimate how many of 2000 cars are red.

7 Explain why the mean is a good average for heights.

8 Two shops' waiting times:
Shop P mean 4 min, range 10 min.
Shop Q mean 5 min, range 2 min.

Which shop would you choose if you need to know how long you will wait? Explain.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Comparing and interpreting data

1 A scores more on average.

B is more consistent.

2 The median: the mean is distorted by the £600k house.

3 The middle half of the data is widely spread.

4 Year 9 taller on average (median 158 vs 155).

Similar spread (IQR 12 for both).

5 A larger sample reduces the effect of chance variation.

6 $\frac{12}{80} \times 2000$

300

7 Heights have few extreme values, and the mean uses all the data.

8 Q: its times are far more consistent, so you can predict the wait.

Mr&Mrs MATHS