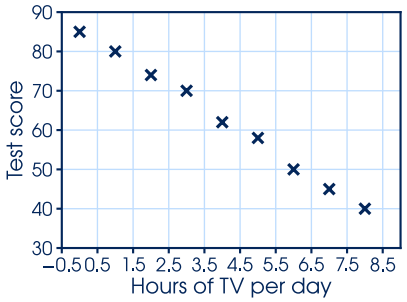
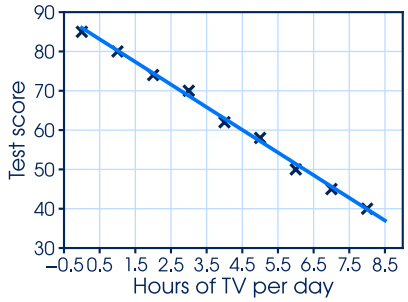
GCSE HIGHER · REVISION MAT 5

Scatter graphs and correlation

1 Describe the correlation.

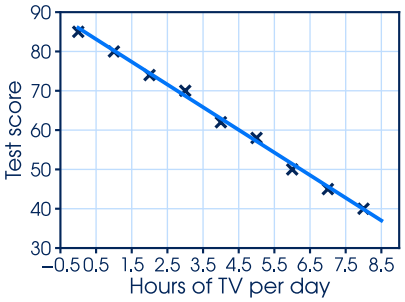


2 Estimate the score of a student who watches 4.5 hours of TV.



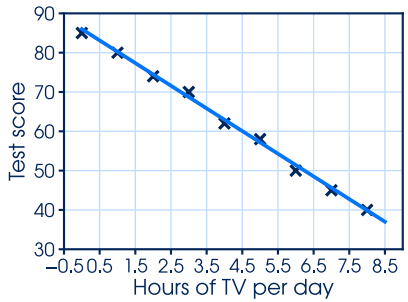
3 Explain why watching TV may not be the cause of lower scores.

4 Estimate the hours of TV watched by a student who scores 75.



5 Explain why it is unreliable to predict the score for 12 hours of TV.

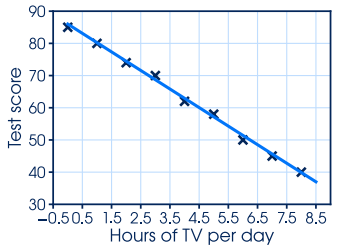
6 Interpret the gradient of the line of best fit.



7 Describe what a scatter graph with no correlation looks like.

8 A student watches 1 hour of TV and scores 50.

Comment on this result.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Scatter graphs and correlation

1 Strong negative correlation

2 About 60

3 Other factors, such as less revision time, may explain both.

4 About 2 hours

5 It is outside the data (extrapolation) and the score cannot go below 0.

6 Gradient ≈ −5.8

About 6 marks fewer per extra hour of TV

7 Points are spread randomly with no upward or downward trend.

8 Well below the trend (about 80 expected): an outlier.