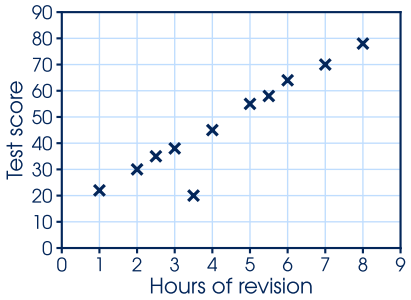
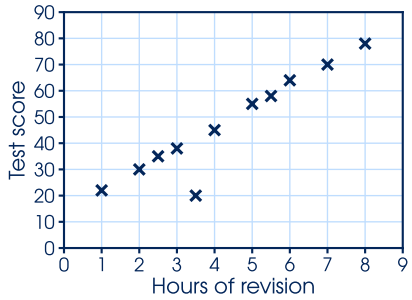
GCSE HIGHER · REVISION MAT 1

Scatter graphs and correlation

1 Describe the correlation.



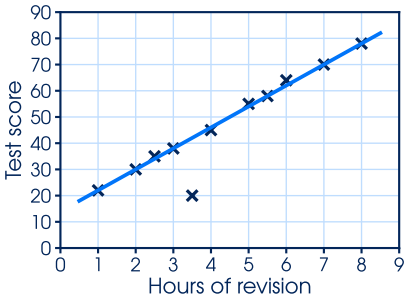
2 Write down the coordinates of the outlier.



3 Ice cream sales and sunburn cases both rise in summer.

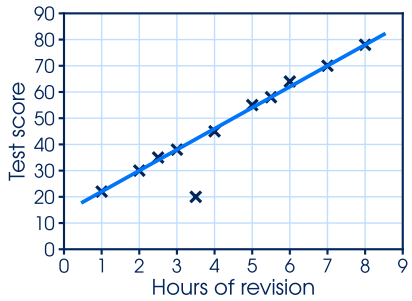
Explain why this does not mean ice cream causes sunburn.

4 Use the line of best fit to estimate the score after 4.5 hours of revision.

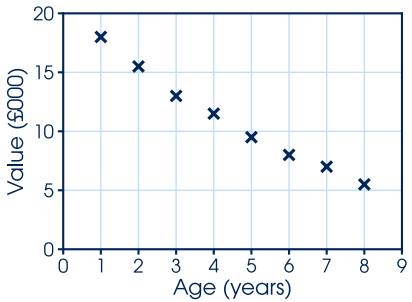


5 Explain why using this line to estimate the score after 15 hours is unreliable.

6 Interpret the gradient of the line of best fit.

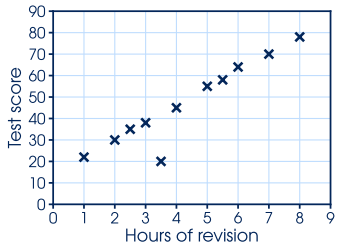


7 Describe the relationship between a car's age and its value.



8 A student says more revision always gives a higher score.

Use the graph to comment.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Scatter graphs and correlation

1 Positive correlation

2 (3.5, 20)

3 Both are linked to hot, sunny weather; correlation does not show cause.

4 About 50

5 15 hours is far outside the data (extrapolation).

6 Gradient ≈ 8

About 8 extra marks for each extra hour of revision

7 Negative correlation: older cars are worth less.

8 The correlation is positive but not perfect; the outlier revised 3.5 hours but scored only 20.

Mr&Mrs MATHS