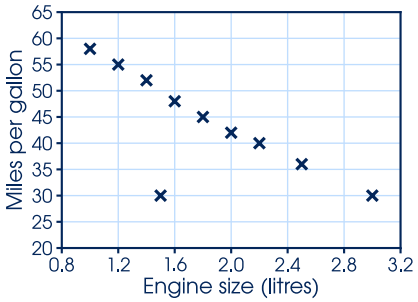
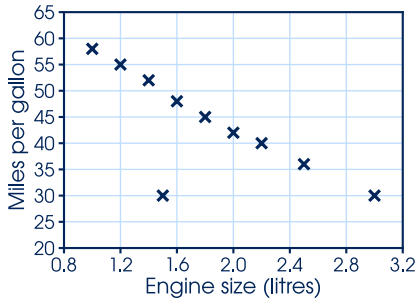
GCSE HIGHER · REVISION MAT 4

Scatter graphs and correlation

1 Describe the correlation.

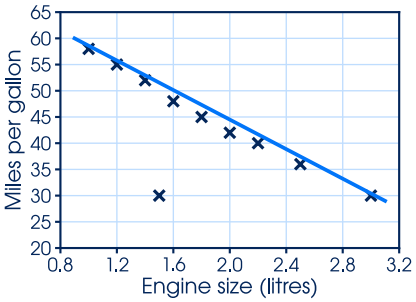


2 Write down the coordinates of the outlier.



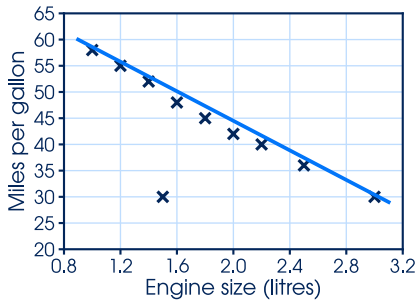
3 Explain what negative correlation means in this context.

4 Estimate the miles per gallon for a 2.4-litre engine.



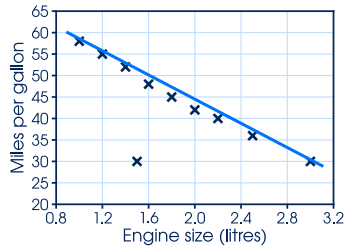
5 Explain why the outlier should be ignored when drawing a line of best fit.

6 Estimate the engine size of a car that does 50 mpg.



7 Explain whether a bigger engine causes lower fuel economy, using the graph.

8 Interpret the gradient of the line of best fit.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Scatter graphs and correlation

1 Negative correlation

2 (1.5, 30)

3 Cars with bigger engines tend to travel fewer miles per gallon.

4 About 38 mpg

5 It does not follow the trend and would pull the line away from the other points.

6 About 1.6 litres

7 The graph shows a link, but it cannot prove cause; other factors such as car weight may matter.

8 Gradient ≈ -14

About 14 fewer miles per gallon for each extra litre

Mr&Mrs MATHS