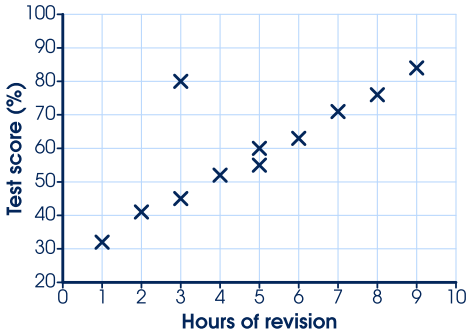
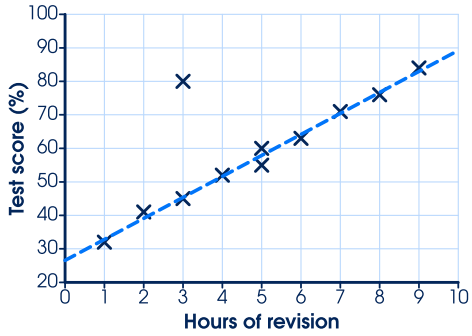
GCSE FOUNDATION · REVISION MAT 4

Lines of best fit

1 Draw a line of best fit on the scatter graph.

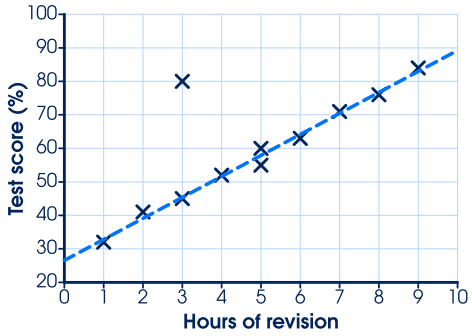


2 A line of best fit has been drawn.



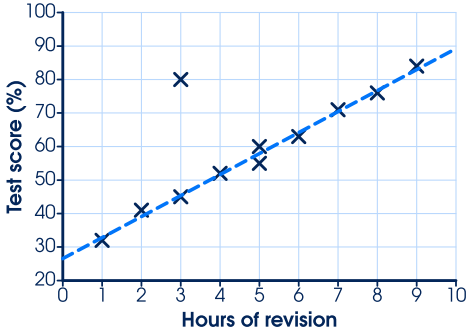
Estimate the test score when the hours of revision is 4.5.

3 A line of best fit has been drawn.



Estimate the hours of revision when the test score is 60.

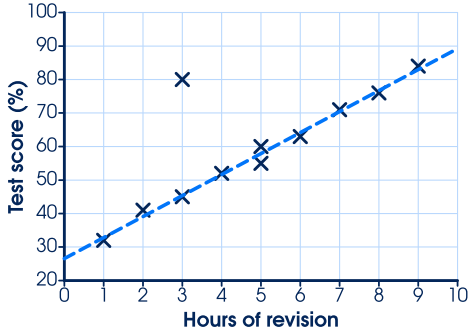
4 A line of best fit has been drawn.



Show that the line passes close to (4.5, 55).

5 Explain why you should ignore an outlier when drawing a line of best fit.

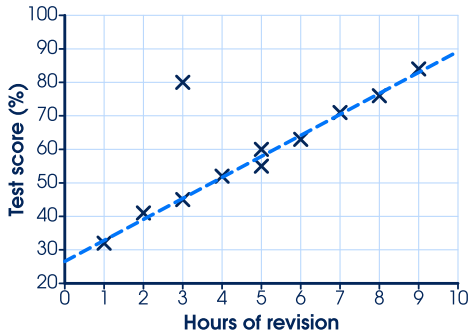
6 A line of best fit has been drawn.



Ruby uses the line to make an estimate inside the data range. Max uses it to estimate for a value far outside the range.

Whose estimate is more reliable? Explain.

1



A straight line through the middle of the points, ignoring the outlier.

2 About **54.8** (accept close readings)

3 About **5.3** (accept close readings)

ANSWERS · REVISION MAT 4

Lines of best fit

4 Reading up from 4.5 meets the line at about **55** ✓

5 An outlier does not follow the general pattern.

Including it would pull the line away from the trend of the other points.

6 **Ruby's**: it is inside the range of the data (interpolation).

Max is extrapolating; the trend may not continue.

Mr&Mrs MATHS