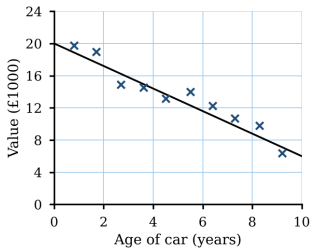
Day 355 **B Tier 10-a-day**

1 The scatter graph shows information about age of car and value.
A line of best fit is drawn.
(a) Describe the correlation.
(b) Use the line of best fit to estimate the value when age of car is 5.



2 A road is 0.4 km long.
It is drawn on a map with scale 1 : 10 000.
Work out the length of the road on the map, in cm.

3 The ratio of adults to children among the people on a bus is 3 : 2.
There are 12 adults.
How many children are there?

4 Work out
(a) $\frac{2}{5} + \frac{1}{9}$
(b) $\frac{7}{9} - \frac{1}{6}$
Give each answer in its simplest form.

5 (a) The point P(2, 4) is reflected in the line y = x. Write down the coordinates of the image.
(b) The point P(2, 4) is rotated 180° about the origin. Write down the coordinates of the image.

Day 355 **B Tier 10-a-day**

6 Complete the table of values for $y = x^2 - x + 2$

x	−2	−1	0	1	2	3
y		4		2		

7 (a) Hannah scores 57 out of 125 in a quiz.
Write this as a percentage.
(b) Write £1.70 as a percentage of £5.

8 In a bag of counters, the ratio of black to white is 4 : 7.
The ratio of white to green is 5 : 3.
Write down the ratio black : white : green.

9 Factorise $a^2 - 64$

10 A rectangle has length (3x + 4) cm and width (2x + 3) cm.
Write down an expression, in terms of x, for the perimeter of the rectangle.
Give your answer in its simplest form.