Day 111	B Tier 10-a-day
1 Work out the value of 6m + 15 when m = 7	
2 Work out (a) 4.7 × 0.4 (b) 0.17 × 5	
3 Ravi, Kira and Harry share 60 stamps in the ratio 1 : 3 : 2. Work out how many Kira gets.	
4 Factorise $t^2 - 5t$	
5 (a) The point P(4, 2) is rotated 90° anticlockwise about the origin. Write down the coordinates of the image. (b) The point P(4, 2) is rotated 90° clockwise about the origin. Write down the coordinates of the image.	

Day 111 **B Tier 10-a-day**

6 There are 100 students.

$\frac{1}{5}$ of them are boys and the rest are girls.

$\frac{2}{5}$ of the boys and $\frac{2}{5}$ of the girls walk to school.

One person is chosen at random. Work out the probability that they walk to school.

7 Beth bought a bike for £2000 and sold it for £500.

Work out the percentage loss.

8 The table shows the books read by each member of a club in a month.

Work out the mean.

Books	1	2	3	4	5
Frequency	2	5	7	5	9

9 A rectangle has length (x + 5) cm and width (x − 1) cm.

The area of the rectangle is 27 cm^2.

(a) Show that $x^2 + 4x - 32 = 0$

(b) Hence work out the length of the rectangle.

10 A road is 5 km long.

It is drawn on a map with scale 1 : 50 000.

Work out the length of the road on the map, in cm.