Day 311	B Tier 10-a-day
1 Here are four digit cards. 7 8 9 6 Use all four cards to make the largest possible even number.	
2 Work out the sum of the interior angles of a nonagon.	
3 A rectangle has length (x + 6) cm and width (x − 7) cm. The area of the rectangle is 30 cm^2. (a) Show that $x^2 - x - 72 = 0$ (b) Hence work out the length of the rectangle.	
4 A rectangular wall measures 11 m by 9 m. A rectangle measuring 3 m by 4 m is cut out. Work out the area that is left.	
5 Work out (a) $\frac{3}{5}$ of 40 (b) $\frac{3}{4}$ of £60	

Day 311	B Tier 10-a-day
6 A cyclist travels 30 km in 1 hour 15 minutes. Work out its average speed in km per hour.	
7 A cone has base radius 8 m and vertical height 12 m. Volume of a cone = $\frac{1}{3}\pi r^2 h$ Work out the volume of the cone. Give your answer in terms of π.	
8 A straight line has gradient -1 and passes through the point (1, 7). Find the equation of the line.	
9 A bird flies at 16 metres per second. Work out this speed in kilometres per hour.	
10 £1 = 1.2 euros (a) Change £80 into euros. (b) Change €180 into pounds.	