Day 364	B Tier 10-a-day
1 Nia types at 35 words per minute. (a) How many words does Nia type in 10 minutes? (b) How long does Nia take to type 1050 words?	
2 A cuboid has volume 168 cm^3. The length of the cuboid is 4 cm and the width is 7 cm. Work out the height of the cuboid.	
3 What fraction of 1 hour is 20 minutes? Give your answer in its simplest form.	
4 The angles of a triangle are x°, 2x° and (2x + 35)°. Work out the size of the largest angle.	
5 Two buses leave a bus station at 07:30. One bus leaves every 30 minutes. The other bus leaves every 10 minutes. At what time do both buses next leave together?	

Day 364	B Tier 10-a-day
6 80 deer in a lake are caught, tagged and returned to the lake. Later, a sample of 30 deer is caught and 8 of them are tagged. Estimate the total number of deer in the lake.	
7 $A = 2^3 \times 3^2$ $B = 2^2 \times 7^2$ Write down, as a product of prime factors, (a) the HCF of A and B (b) the LCM of A and B	
8 28 viewers were asked. 17 of them watch drama and 10 of them watch comedy. 6 of them did both. (a) How many did neither? (b) One is chosen at random. Find the probability that they watch drama but do not watch comedy.	
9 Triangle ABC is isosceles with AB = AC = 13 m. (Calculator) The base BC = 22 m. Work out the size of angle ABC. Give your answer correct to 1 decimal place.	
10 Here is an iteration formula. $x_{n+1} = 5 + \frac{4}{x_n}$ $x_0 = 2$ (a) Work out x_1 (b) Work out x_2. Give your answer correct to 3 decimal places. (Calculator)	