Day 149	B Tier 10-a-day
1 Work out the gradient of the straight line that passes through the points $(-2, 8)$ and $(-5, 14)$.	
2 Write down the number of faces and vertices of a cylinder. Count curved faces and curved edges as well.	
3 A taxi firm charges £38 plus £15 for each mile travelled. (a) Work out the total cost for 5 miles. (b) The total cost is £143. Work out the number of miles.	
4 10 pumps take 12 minutes to empty a pool. All the pumps work at the same rate. How long would it take 2 pumps?	
5 The exchange rate is £1 = €1.12. (Calculator) (a) Change £40 to euros. (b) Change €168 to pounds (£).	

Day 149	B Tier 10-a-day
6 A triangle has sides of length 9 cm, 8 cm and 6 cm. Is the triangle right-angled? You must show your working.	
7 The mean of 4 numbers is 11. 3 of the numbers are 11, 10, 9. Work out the other number.	
8 There are 6.3×10^3 fish in a lake. The number triples every day. How many are there after 6 days? Give your answer in standard form.	
9 Solve $x^2 - 7x + 6 = 0$	
10 Write these numbers in order of size. Start with the smallest number. 0.39, 0.227, 0.22, 0.2	