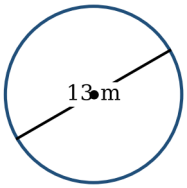
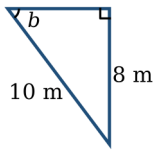
Day 142	B Tier 10-a-day
1 The ratio of cats to dogs among the pets at a rescue centre is 3 : 2. There are 21 cats. How many dogs are there?	
2 The nth term of a sequence is 8n + 3 (a) Work out the 10th term. (b) Is 203 a term in the sequence? You must show how you get your answer.	
3 The diagram shows a circle with diameter 13 m. (Calculator) Work out the circumference of the circle. Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
4 Solve $6x - 7 = 9$ Give your answer as a fraction in its simplest form.	
5 $A = 5^2 \times 7$ $B = 2^2 \times 3 \times 5^2$ Write down, as a product of prime factors, (a) the HCF of A and B (b) the LCM of A and B	

Day 142	B Tier 10-a-day
6 Sam earns £10 per hour for the first 35 hours worked each week. Any extra hours are paid at time and a half. Last week Sam worked 37 hours. Work out Sam's total pay for last week.	
7 Find the size of angle b. (Calculator) Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
8 The length of a rectangle is 25 cm and its width is 8 cm. Both measurements are correct to the nearest cm. Work out the lower bound for the area of the rectangle.	
9 The scale of a map is 1 : 10,000. Two villages are 1.75 km apart. How far apart are they on the map? Give your answer in centimetres.	
10 In a sale, the price of a sofa is reduced by 20%. (Calculator) Two weeks later it is reduced by a further 20% of the new price. The final price is £96. Work out the original price of the sofa.	