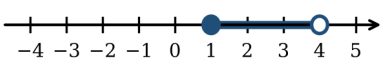
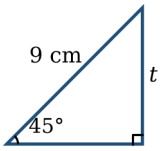
Day 183	B Tier 10-a-day
1 Solve $5(3x + 3) = 45$	
2 A and B are two points 4 cm apart. A point P is always the same distance from A and from B. Describe the locus of the point P.	
3 Here are Isla's and Femi's scores in a game. Isla: 33, 32, 28, 42, 49 Femi: 39, 35, 41, 39, 38 Compare their results using the mean and the range.	
4 Here are four digit cards. 9 3 2 8 Use all four cards to make the largest possible number. Work out the difference between the largest and smallest possible numbers.	
5 (a) Write down the inequality shown on the number line. (b) Write down all the integers that satisfy the inequality.  	

Day 183	B Tier 10-a-day
6 Find the length of t. (Calculator) Give your answer correct to 1 decimal place. The diagram is not drawn accurately.  	
7 $E = \frac{1}{2}mv^2$ Work out the value of E when m = 5 and v = 4	
8 A spacecraft travels at 9×10^8 km per hour. It travels for 3.2×10^3 hours at this speed. Work out how far it travels. Give your answer in standard form.	
9 A bag contains 7 mint sweets and 6 toffee sweets. Ben takes one at random and does not replace it, then takes a second. Work out the probability that the two are different colours.	
10 A cyclist travels at 60 km/h for 0.5 hours and then at 72 km/h for 1.5 hours. Work out its average speed for the whole journey.	