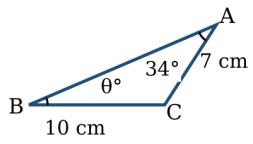
Day 236	S Tier 10-a-day
1 Factorise $12x^2 + 29x + 14$	
2 12 workers can build a wall in 15 days. After 3 days, 4 of the workers leave. The rest carry on working at the same rate. How many more days does it take to finish?	
3 The point P(−4, −6) lies on the graph of y = f(x). Write down the coordinates of the image of P on the graph of (a) y = f(x + 5) (b) y = f(−x)	
4 The diagram shows triangle ABC. (Calculator) Angle BAC = 34° and angle ABC is acute. Work out the size of angle ABC, marked θ. Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
5 Tap A can fill an empty tank in 20 minutes. Tap B can fill an empty tank in 30 minutes. Both are turned on at the same time. How long do they take to fill an empty tank?	

Day 236	S Tier 10-a-day
6 Solve $x^{-\frac{3}{2}} = \frac{1}{125}$	
7 In a group of employees, 35% are men and the rest are women. 45% of the men and 30% of the women work from home. What percentage of all the employees work from home?	
8 The 4-digit number 107k is a multiple of 4. k is a single digit. Find all the possible values of k.	
9 The point P(−3, −1) is reflected in the line y = x. The image is then reflected in the x-axis. (a) Write down the coordinates of the final image of P. (b) Describe fully the single transformation that is equivalent to these two transformations.	
10 The probability that it rains on a day is 0.4. If it rains, the probability that Ali is late for school is 0.7. If it does not rain, the probability that Ali is late is 0.4. (a) Work out the probability that Ali is late. (b) Ali is late. Work out the probability that it rained.	