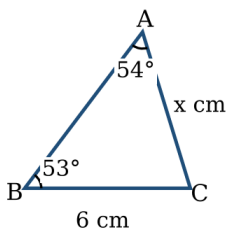
Day 268	S Tier 10-a-day
1 Nadia changes £400 into euros at £1 = €1.18. Nadia spends €50 and then changes the rest back into pounds at £1 = €1.6. How many pounds does Nadia get back?	
2 In triangle PQR, side QR is extended to S. Angle QPR = (4x + 15)° Angle PQR = (3x − 20)° Angle PRS = (6x + 17)° (a) Work out the value of x. (b) Work out the size of angle PRQ.	
3 Hire Shop A has a delivery charge of £3.50 plus £6 per day. Hire Shop B has a delivery charge of £27.50 plus £2 per day. (a) Work out the number of days for which the two costs are the same. (b) Which is cheaper for 11 days, and by how much?	
4 12 workers can build a wall in 30 days. After 6 days, 6 of the workers leave. The rest carry on working at the same rate. How many more days does it take to finish?	
5 The diagram shows triangle ABC. (Calculator) Work out the length of AC. Give your answer correct to 1 decimal place. The diagram is not drawn accurately.  	

Day 268	S Tier 10-a-day
6 R is 15% less than D. D is 10% more than C. Work out R as a percentage of C.	
7 Solve the simultaneous equations $x^2 + y^2 = 45$ $y = x + 9$	
8 How many factors does 160 have? Include 1 and 160.	
9 P is directly proportional to the square root of t. When t = 16, P = 20. (a) Find a formula for P in terms of t. (b) Find the value of P when t = 9.	
10 Write $\frac{9^{n+2} \times 3^{n-3}}{3^n}$ in the form 3^{an+c} where a and c are integers.	