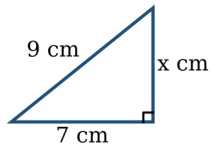
Day 85	A Tier 10-a-day
1 £1 = €1.35. (a) Change £400 to euros. (b) Change €135 to pounds.	
2 A closed block is a cuboid measuring 4 cm by 2 cm by 3 cm. Work out the total surface area.	
3 Expand and simplify $(2x - 4)(2x - 6)$	
4 Work out the length of x. (Calculator) Give your answer to 3 significant figures. The diagram is not drawn accurately. 	
5 Work out the value of (a) $100^{\frac{-3}{2}}$ (b) $(\frac{2}{5})^{-2}$	

Day 85	A Tier 10-a-day
6 A cyclist travels for 1 hour 30 minutes at 70 km/h, then for 3 hours at 55 km/h. Work out the average speed for the whole journey.	
7 Here are the first five terms of a quadratic sequence. $-3, -3, 1, 9, 21$ (a) Find an expression for the nth term. (b) Work out the 20th term.	
8 $A = 5^3 \times 7^3$ $B = 2^2 \times 5^4 \times 7^4$ Find the highest common factor (HCF) and the lowest common multiple (LCM) of A and B. Give your answers as products of prime factors.	
9 In a sale, all prices are reduced by 12%. A watch costs £220 in the sale. Work out the original price of the watch.	
10 Two similar models are 15 cm and 20 cm tall. The surface area of the smaller model is 180 cm^2. Work out the surface area of the larger model.	