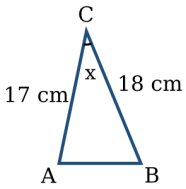
Day 56	A Tier 10-a-day
1 Omar and Kai share some stickers in the ratio 2 : 3. Kai gets 18 stickers. How many stickers does Omar get?	
2 Factorise $x^2 - 2x - 24$	
3 Work out $(3.5 \times 10^8) \times (1.2 \times 10^{-2})$ Give your answer in standard form.	
4 A school has 140 students in Year 9, 80 in Year 10 and 200 in Year 11. A stratified sample of 21 students is to be taken. Work out how many students should be chosen from Year 10.	
5 Solve the simultaneous equations $3x - 4y = 17$ $-4x - 2y = -8$	

Day 56	A Tier 10-a-day
6 The area of triangle ABC is 85.6 cm^2. (Calculator) Angle x is acute. Work out the size of angle x. Give your answer to 1 decimal place. The diagram is not drawn accurately.  	
7 (a) Show that $0.\dot{7}\dot{2} = \frac{8}{11}$ (b) Hence write $1.\dot{7}\dot{2}$ as a mixed number in its simplest form.	
8 The mean of the five numbers 10, 20, 5, 20, x is 15. Work out the value of x.	
9 Make x the subject of $y = \frac{5x - 4}{x - 5}$	
10 Boat P sails 12 miles from a harbour on a bearing of 330°. Boat Q sails 21 miles from the same harbour on a bearing of 210°. (Calculator) Work out the distance between the two boats. Give your answer to 3 significant figures.	