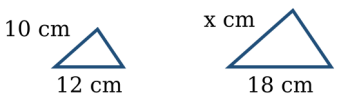
Day 27	A Tier 10-a-day
1 Estimate the value of $\sqrt{48.7} \times 6.7$, by rounding 48.7 to the nearest square number and 6.7 to 1 significant figure.	
2 A plumber charges a call-out fee of £40 plus £35 for each hour of work. (a) Write a formula for the total cost, £C, after h hours. (b) Chloe pays £250 in total. Work out the number of hours.	
3 Bus A leaves a bus station every 20 minutes. Bus B leaves the same station every 15 minutes. Both buses leave together at 7:10 am. At what time will they next leave together?	
4 A shop sells rice in 3 different sizes. Small bag: 250 g for £2.10 Medium bag: 400 g for £3.20 Large bag: 1000 g for £8.65 Which bag is the best value for money? You must show your working.	
5 The two triangles are similar. Work out the value of x. The diagrams are not drawn accurately. 	

Day 27	A Tier 10-a-day
6 Here are the first four terms of a sequence. 1, 4, 7, 10 (a) Find an expression for the nth term. (b) Work out the 30th term.	
7 There are 200 passengers on a plane. 60% of the passengers are children. 20% of the children are under 5 years old. How many passengers are children under 5?	
8 The mean mark of 10 adults in a test is 79. The mean mark of 14 children in the same test is 67. Work out the mean mark of all 24 people.	
9 Without using a calculator, work out the exact value of $6 \cos 60° + 3 \tan 45°$ Give your answer in its simplest form.	
10 Solve the simultaneous equations $x^2 + y^2 = 25$ $y = x + 7$	