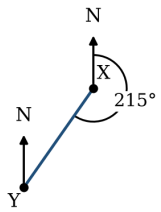
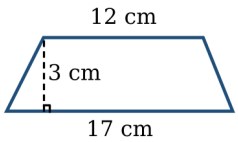
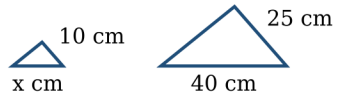
Day 311	A Tier 10-a-day
1 The bearing of Y from X is 215°. Work out the bearing of X from Y. The diagram is not drawn accurately.  	
2 Sam is x years old. His gran is 2 times as old as Sam, plus 6 years. The sum of their ages is 48 years. Work out how old his gran is.	
3 The diagram shows a trapezium. Work out the area of the trapezium. The diagram is not drawn accurately.  	
4 A cafe menu has 3 starters, 4 main courses and 4 desserts. (a) How many different three-course meals are possible? (b) A customer chooses a main course and either a starter or a dessert (not both). How many different meals are possible?	
5 Dev and Harry each invest £4000 for 2 years. (Calculator) Dev's account pays 3% simple interest per year. Harry's account pays 3% compound interest per year. Work out how much more interest Harry earns than Dev.	

Day 311	A Tier 10-a-day
6 The two triangles are similar. Work out the value of x. The diagrams are not drawn accurately.  	
7 2 footballs and 3 netballs cost £39. 1 football and 1 netball cost £17. Work out the cost of one netball.	
8 y is directly proportional to the square root of x. When x = 4, y = 16. (a) Find a formula for y in terms of x. (b) Work out the positive value of x when y = 40.	
9 Noah invests £2000 in a savings account. (Calculator) The account pays compound interest at a fixed rate each year. After 2 years there is £2080.80 in the account. Work out the annual rate of interest.	
10 Rationalise the denominator of $\frac{18}{5-\sqrt{7}}$ Give your answer in the form $a + b\sqrt{c}$ where a and b are integers.	