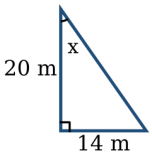
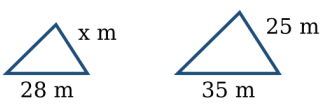
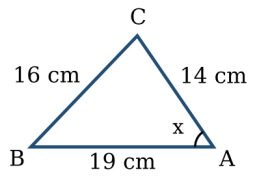
Day 140	A Tier 10-a-day
1 £1 = €1.12. (a) Change £260 to euros. (b) Change €112 to pounds.	
2 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
3 (a) Write 0.0022 in standard form. (b) Write 6.2×10^4 as an ordinary number.	
4 (a) Factorise $9x^2 - 36$ (b) Use the same idea to work out $163^2 - 37^2$ without a calculator.	
5 The two triangles are similar. Work out the value of x. The diagrams are not drawn accurately. 	

Day 140	A Tier 10-a-day
6 The value of an investment grows by 10% each year. (Calculator) After 2 years it is worth £12,705. Work out its value at the start.	
7 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
8 Write as a single fraction $\frac{4}{(x+5)} - \frac{1}{(x-1)}$	
9 8 machines take 6 hours to make a batch of bottles. All the machines work at the same rate. How long would it take 12 machines to make a batch of bottles?	
10 A rectangle has width x cm and length (x + 2) cm. The area of the rectangle is 24 cm^2. (a) Show that $x^2 + 2x - 24 = 0$ (b) Work out the value of x.	