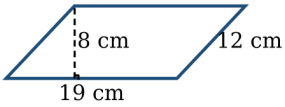
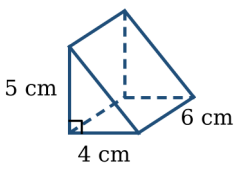
Day 362	A Tier 10-a-day
1 (a) A train leaves London at 1015. The journey takes 3 hours 13 minutes. Work out the time it ends. (b) Change 2.2 hours into hours and minutes.	
2 The diagram shows a parallelogram. Work out its area. The diagram is not drawn accurately. 	
3 A bag contains 7 black pens and 2 blue pens. Three pens are taken at random without replacement. Work out the probability that exactly one of the three pens is blue.	
4 (a) Change 8 cm^2 to mm^2. (b) Change 3,500,000 cm^3 to m^3.	
5 The diagram shows a prism. The cross-section of the prism is a right-angled triangle. Work out the volume of the prism. The diagram is not drawn accurately. 	

Day 362	A Tier 10-a-day
6 The curve C has equation $y = x^2 - 4x + 3$ (a) Find the coordinates of the points where C crosses the x-axis. (b) Find the coordinates of the turning point of C.	
7 A bag contains red counters and blue counters in the ratio 5 : 6. 11 more red counters are added to the bag. The ratio of red counters to blue counters is now 6 : 5. How many counters were in the bag at the start?	
8 The value of a car falls by 2% each year. (Calculator) After 2 years it is worth £33,614. Work out its value at the start.	
9 Leah invests £8000 in a savings account. (Calculator) The account pays compound interest at a fixed rate each year. After 2 years there is £8988.80 in the account. Work out the annual rate of interest.	
10 Solve the simultaneous equations $y = x^2 - 3x + 4$ $y = -2x + 6$	