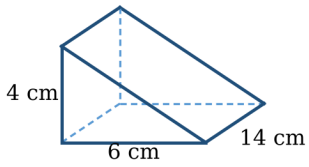
Day 78	B Tier 10-a-day
1 This prism has a right-angled triangle as its cross-section. Work out the volume of the prism. The diagram is not drawn accurately.  	
2 Meg has x football cards. Sam has 6 more football cards than Meg. Nia has 2 times as many football cards as Meg. (a) Write an expression, in terms of x, for the number of football cards Sam has. (b) Write an expression, in terms of x, for the total number of football cards the three of them have. Give your answer in its simplest form.	
3 (a) Change 5.1 m to cm. (b) Change 84 mm to cm.	
4 A prism has a cross-section with area 50 m^2. The length of the prism is 7 m. Work out the volume of the prism.	
5 Factorise $x^2 - 5x - 14$	

Day 78	B Tier 10-a-day
6 8 workers take 3 days to dig a trench. All the workers work at the same rate. How long would it take 2 workers?	
7 Write these numbers in order of size. Start with the smallest. 4×10^5, 44, 3.2×10^{-1}, 0.00044	
8 A tower is 39 m tall. (Calculator) Mia stands 26 m from the base of the tower on level ground. Work out the angle of elevation of the top of the tower from Mia. Give your answer correct to 1 decimal place.	
9 The stem and leaf diagram shows 11 values. (a) Find the median. (b) Work out the range. **Stem** **Leaf** 1 | 0 1 4 5 8 9 2 | 0 3 3 | 2 3 6 Key: 1 | 0 means 10	
10 (a) Nina scores 52 out of 200 in a test. Write this as a percentage. (b) Write 70p as a percentage of £2.	