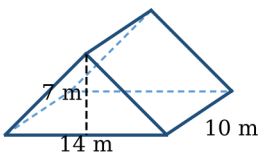
Day 85	B Tier 10-a-day
1 Write down the number of faces and edges of a hexagonal-based pyramid.	
2 A car travels 10 km on each litre of petrol. (Calculator) Petrol costs £1.30 per litre. Work out the cost of the petrol for a journey of 120 km.	
3 A rectangle has length (3x + 1) cm and width (2x − 1) cm. The perimeter of the rectangle is 40 cm. (a) Work out the value of x. (b) Work out the area of the rectangle.	
4 A rectangle has length (3x + 3) cm and width (x + 4) cm. The perimeter of the rectangle is 54 cm. (a) Work out the value of x. (b) Work out the area of the rectangle.	
5 The diagram shows a prism. Its cross-section is an isosceles triangle. Find the volume of this prism. The diagram is not drawn accurately.  	

Day 85 **B Tier 10-a-day**

6 Write each answer as a single power of 5.
(a) $5^7 \times 5^6$
(b) $5^{13} \div 5^6$

7 Chloe and Jack share some money in the ratio 8 : 1.
Chloe gets £70 more than Jack.
How much money does Jack get?

8 A rectangle has length (x + 4) cm and width (x − 1) cm.
The area of the rectangle is 50 cm^2.
(a) Show that $x^2 + 3x - 54 = 0$
(b) Hence work out the length of the rectangle.

9 The price of a meal including VAT at 20% is £144. (Calculator)
Work out the price of the meal before VAT was added.

10 The cumulative frequency graph shows the times taken by 40 students to complete a puzzle.
(a) Use the graph to estimate the median.
(b) Work out an estimate for the interquartile range.

