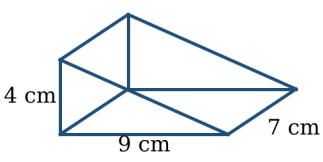
Day 108	B Tier 10-a-day
1 Solve x + 9 = 19	
2 (a) Write 9:15 pm using the 24-hour clock. (b) Write 20:40 using am or pm.	
3 Make n the subject of the formula T = 3(n − k)	
4 A coin is thrown 100 times. It lands on heads 60 times. (a) Work out the relative frequency of heads. (b) Is the coin fair? Give a reason.	
5 Here is a prism. Its cross-section is a right-angled triangle. Find the volume of this prism. The diagram is not drawn accurately. 	

Day 108	B Tier 10-a-day
6 A block causes a pressure of 8 N/m^2 on the floor. The area in contact with the floor is 2 m^2. Work out the force exerted on the floor.	
7 A window is made from a rectangle and a semicircle. (Calculator) The rectangle is 4 m wide and 3 m high. The diameter of the semicircle is 4 m. (a) Work out the area of the shape. (b) Work out the perimeter of the shape. Give each answer correct to 1 decimal place.	
8 A paddling pool is $\frac{1}{4}$ full. 65 litres of water are added. The paddling pool is now $\frac{1}{2}$ full. Work out the capacity of the paddling pool.	
9 A coach travels at 80 km/h for 1.5 hours and then at 90 km/h for 1.5 hours. Work out its average speed for the whole journey.	
10 Priya's rent goes up by 12%. (Calculator) The new rent is £280 a month. Work out the rent before the increase.	