Day 71	B Tier 10-a-day
1 A cylinder has radius 4 m and height 11 m. Work out its volume. Give your answer in terms of π.	
2 (a) Write down all the factors of 60. (b) Write down all the multiples of 7 between 55 and 76.	
3 (a) The point P(1, −4) is rotated 90° clockwise about the origin. Write down the coordinates of the image. (b) The point P(1, −4) is rotated 180° about the origin. Write down the coordinates of the image.	
4 M is the midpoint of AB. A is the point (9, 8) and M is the point (6, 4). Find the coordinates of B.	
5 A car uses 30 litres of petrol to travel 300 km. Work out how many kilometres it travels on each litre of petrol.	

Day 71	B Tier 10-a-day
6 A straight line has equation $y = 3x + 15$ (a) Write down the coordinates of the point where the line crosses the y-axis. (b) Work out the coordinates of the point where the line crosses the x-axis.	
7 The area of a circle is 64π m^2. Work out the radius of the circle.	
8 23 households were asked. 5 of them have a cat and 10 of them have a dog. 2 of them did both. (a) How many did neither? (b) One is chosen at random. Find the probability that they have a cat but do not have a dog.	
9 The length of a rectangle is 9 cm and its width is 9 cm. Both measurements are correct to the nearest cm. Work out the upper bound for the perimeter of the rectangle.	
10 A shop sells pens and pencils. All pens cost the same and all pencils cost the same. 3 pens and 2 pencils cost 230p. 4 pens and 2 pencils cost 270p. Work out the cost of one pen and the cost of one pencil.	