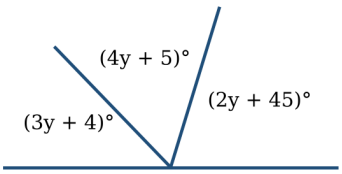
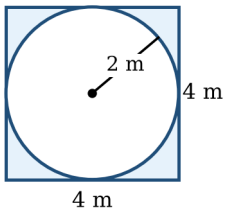
Day 203	B Tier 10-a-day
1 Solve $a - 9 = 20$	
2 The diagram shows 3 angles on a straight line. Work out the value of y. The diagram is not drawn accurately.  	
3 The ratio of red to blue among the counters in a bag is 2 : 3. There are 8 red. How many blue are there?	
4 An isosceles triangle has two equal sides of length (4x + 2) cm and a third side of length (3x − 2) cm. The perimeter of the triangle is 90 cm. Work out the value of x.	
5 Work out (a) $\frac{2}{9} + \frac{5}{8}$ (b) $\frac{2}{3} - \frac{3}{8}$ Give each answer in its simplest form.	

Day 203	B Tier 10-a-day
6 The diagram shows a square of side 4 m with a circle of radius 2 m cut out. The circle is in the centre of the square. Work out the area of the shaded region. Give your answer in terms of π. The diagram is not drawn accurately. 	
7 Write each answer as a single power of 10. (a) $10^7 \times 10^3$ (b) $10^{10} \div 10^3$	
8 A theme park sells adult tickets and child tickets. 2 adult tickets and 1 child ticket cost £33. 4 adult tickets and 1 child ticket cost £63. Work out the cost of one adult ticket and the cost of one child ticket.	
9 40 birds in a lake are caught, tagged and returned to the lake. Later, a sample of 30 birds is caught and 4 of them are tagged. Estimate the total number of birds in the lake.	
10 A jug holds 1.05 litres of juice. Each glass holds 150 ml. How many glasses can be filled from the jug?	