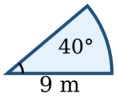
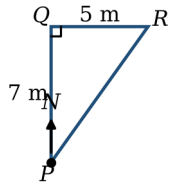
Day 26	B Tier 10-a-day
1 Priya is n years old. Priya's sister is 3 years older. Priya's father is 4 times as old as Priya. (a) Write an expression, in terms of n, for the age of Priya's sister. (b) Write an expression, in terms of n, for the sum of the ages of all three people. Give your answer in its simplest form.	
2 Work out (a) $10 + 4 \times 4^2$ (b) $(6 + 4) \times 8 - 12$	
3 In a pie chart showing the answers of 45 people, the angle for walk is 96°. How many people chose walk?	
4 The diagram shows a sector of a circle with radius 9 m and angle 40°. Work out the area of the sector. Give your answer in terms of π. The diagram is not drawn accurately. 	
5 Work out the gradient of the straight line that passes through the points (2, 5) and (8, 13).	

Day 26	B Tier 10-a-day
6 Leo and Ella share some money in the ratio 8 : 1. Leo gets £56 more than Ella. How much money does Leo get?	
7 Two buses leave a bus station at 09:30. One bus leaves every 12 minutes. The other bus leaves every 8 minutes. At what time do both buses next leave together?	
8 The equation $x^3 - x = 65$ has a solution between 4 and 5. (Calculator) Use trial and improvement to find this solution. Give your answer correct to 1 decimal place.	
9 A boat sails 7 m on a bearing of 000° from P to Q, then 5 m on a bearing of 090° to R. (Calculator) (a) Work out the distance PR. (b) Work out the bearing of R from P. Give your answers correct to 1 decimal place. 	
10 The two triangles are similar. (a) Write down the scale factor of the enlargement from the smaller triangle to the larger triangle. (b) Work out the value of b. The diagram is not drawn accurately. 