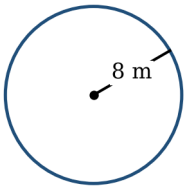
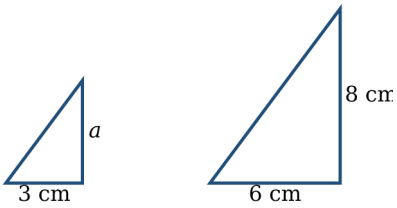
Day 267	B Tier 10-a-day
1 Solve $9x + 6 = 8$ Give your answer as a fraction in its simplest form.	
2 Here are four digit cards. 2 1 7 9 Use all four cards to make the largest possible even number.	
3 A taxi firm charges £6 plus £5 for each mile travelled. (a) Work out the total cost for 7 miles. (b) The total cost is £81. Work out the number of miles.	
4 The diagram shows a circle with radius 8 m. (Calculator) Work out the circumference of the circle. Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
5 Use the fact that $28 \times 34 = 952$ to work out (a) 2800×3.4 (b) $9.52 \div 28$	

Day 267 **B Tier 10-a-day**

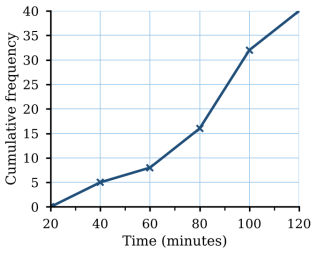
6 A bus travels 36 km at an average speed of 24 km/h.
How long does the journey take?
Give your answer in hours and minutes.

7 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 a.
The diagram is not drawn accurately.



8 The equation $x^3 - 2x = 108$ 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 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.



10 A goat is tied to a post in the middle of a large flat field by a rope 8 m long. (Calculator)
Work out the area of grass the goat can reach.
Give your answer correct to 1 decimal place.