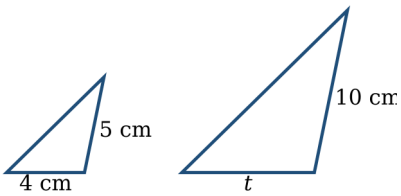
Day 307	B Tier 10-a-day
1 How many lines of symmetry does a regular pentagon have?	
2 Work out (a) $9^2 - (9 - 5) \times 5$ (b) $(12 + 6) \times 7 - 12$	
3 The probability that a bus is late is 30%. Work out the probability that a bus is not late.	
4 Work out (a) 5^{-2} (b) $5^0 + \sqrt{25}$	
5 The first term of a sequence is 8. The term-to-term rule is: multiply by 2 and then subtract 6. Work out the 4th term.	

Day 307 **B Tier 10-a-day**

6 Work out $(15 \times 10^9) \div (5 \times 10^2)$
Give your answer in standard form.

7 The two triangles are similar.
(a) Work out the scale factor of the enlargement from the smaller triangle to the larger triangle.
(b) Work out the value of t.
The diagram is not drawn accurately.



8 The diagram shows the graph of
$y = -x^2 + 8x - 12$
(a) Write down the solutions of $-x^2 + 8x - 12 = 0$
(b) Write down the coordinates of the maximum point of the graph.



9 A cyclist travels at 81 km/h.
Work out its speed in metres per second.

10 A bag contains 2 red counters and 7 blue counters.
Leo takes one at random and does not replace it, then takes a second.
Work out the probability that both are red.