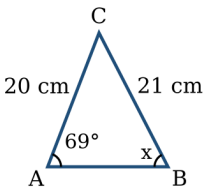
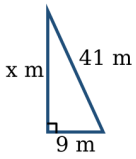
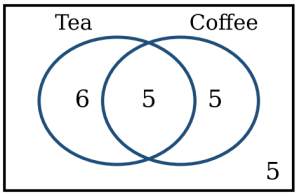
Day 302	A Tier 10-a-day
1 A cuboid has length 13 cm and width 9 cm. Its total surface area is 498 cm^2. Work out the height of the cuboid.	
2 A table rests on an area of 0.5 m^2 of the floor. The pressure on the floor is 120 N/m^2. Work out the force exerted by the table.	
3 $f(x) = -3x + 4$ $g(x) = x^2 - 7$ Find $fg(-1)$	
4 Work out the size of angle x. (Calculator) Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
5 n is the smallest positive integer such that 96 × n is a cube number. Find the value of n.	

Day 302 **A Tier 10-a-day**

6 Work out the length of x.
The diagram is not drawn accurately.



7 The Venn diagram shows information about 21 people.
One person is chosen at random.
(a) The person is in set Tea. Find the probability that they are also in set Coffee.
(b) The person is not in set Coffee. Find the probability that they are in set Tea.



8 The point P(−5, 12) lies on a circle with centre O(0, 0).
(a) Work out the equation of the circle, in the form $x^2 + y^2 = r^2$.
(b) Find the equation of the tangent to the circle at P.

9 Write $0.2\dot{8}$ as a fraction in its simplest form.

10 A bag contains 6 mint sweets and 4 toffee sweets.
Three sweets are taken at random without replacement.
Work out the probability that all three sweets are mint.