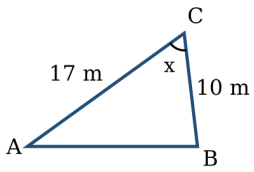
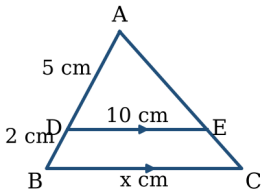
Day 15	A Tier 10-a-day
1 Here are the ingredients for 10 flapjacks. Milk: 500 ml Sugar: 150 g Oats: 250 g (a) Work out how much milk is needed for 20 flapjacks. (b) Hannah has 291 g of sugar. What is the greatest number of flapjacks she can make?	
2 Work out $4\frac{1}{3} - 2\frac{1}{5}$ Give your answer as a mixed number in its simplest form.	
3 The area of triangle ABC is 74.3 m^2. (Calculator) Angle x is acute. Work out the size of angle x. Give your answer to 1 decimal place. The diagram is not drawn accurately. 	
4 Femi buys a phone for £390 and sells it making a profit of 20%. Work out the selling price.	
5 A bag contains 2 mint and 6 fruit sweets. Two sweets are taken at random without replacement. Work out the probability that the two sweets are the same colour.	

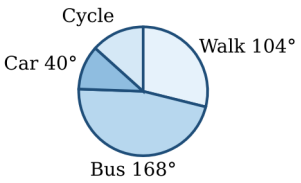
Day 15	A Tier 10-a-day

6 In triangle ABC, DE is parallel to BC.
D is on AB and E is on AC.
Work out the value of x.
The diagram is not drawn accurately.



7 Solve $x^2 - 8x - 3 = 0$ by completing the square.
Give your answers in surd form.

8 The pie chart shows how some students travel to school.
5 students chose car.
(a) Work out the angle for cycle.
(b) How many students chose cycle?



9 A solid is made from a cylinder and a hemisphere.
The cylinder has radius 6 cm and height 5 cm.
The hemisphere has the same radius as the cylinder and sits on top of it.
Work out the total volume. Give your answer in terms of π.

10 Solve the simultaneous equations
$y = x^2 + x - 13$
$y = -7$