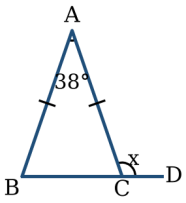
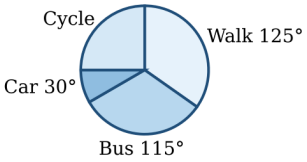
Day 308 **A Tier 10-a-day**

1 Here are the ingredients for 6 muffins.
Oats: 150 g
Flour: 90 g
Sugar: 180 g
(a) Work out how much oats is needed for 18 muffins.
(b) Hannah has 400 g of flour. What is the greatest number of muffins she can make?

2 ABC is an isosceles triangle with AB = AC.
BCD is a straight line.
Angle BAC = 38°.
Work out the size of angle x.
The diagram is not drawn accurately.



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

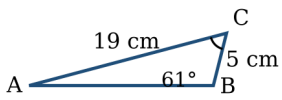


4 Priya spends $\frac{2}{5}$ of the money on a bike and $\frac{2}{5}$ of the money that is left on a helmet.
Priya has £108 left.
How much money did Priya have to begin with?

5 Solve $x^2 + 5x < 0$

Day 308 **A Tier 10-a-day**

6 Work out the area of triangle ABC. (Calculator)
Give your answer to 3 significant figures.
The diagram is not drawn accurately.



7 Expand and simplify
$(x - 5)(x + 5)(x - 1)$

8 (a) Work out 0.2×0.03
(b) Work out $1.08 \div 0.09$

9 Simplify fully

$$\frac{5x^2 - 19x - 30}{2x^2 - 9x - 5}$$

10 The diagram shows a prism.
The cross-section of the prism is a right-angled triangle.
Work out the volume of the prism.
The diagram is not drawn accurately.

