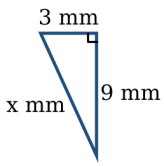
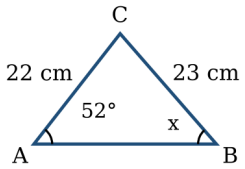
Day 61	A Tier 10-a-day
1 Work out $4\frac{1}{3} + 3\frac{4}{5}$ Give your answer as a mixed number in its simplest form.	
2 Hugo, Isla and Ella share 320 stickers in the ratio 6 : 7 : 3. How many more stickers does Isla get than Ella?	
3 Chloe has £600. Chloe spends $\frac{3}{8}$ of the money on a coat and $\frac{3}{5}$ of the money that is left on some shoes. How much money does Chloe have left?	
4 Work out the length of x. (Calculator) Give your answer to 3 significant figures. The diagram is not drawn accurately. 	
5 Expand and simplify $2(x - 3)(x - 2) - (x - 6)(x + 6)$	

Day 61 **A Tier 10-a-day**

6 There are 35 students in a class.
16 students do drama and 13 students do choir.
9 students do neither.
(a) Work out how many students do both.
(b) One student is chosen at random. Find the probability that they do drama only.

7 Work out the size of angle x. (Calculator)
Give your answer to 1 decimal place.
The diagram is not drawn accurately.



8 $f(x) = \frac{x - 9}{4}$
(a) Find $f^{-1}(x)$
(b) Work out $f^{-1}(5)$

9 A school has 325 students in Year 9, 150 in Year 10 and 325 in Year 11.
A stratified sample of 32 students is to be taken.
Work out how many students should be chosen from Year 10.

10 OAB is a triangle. $\overrightarrow{OA} = \mathbf{a}$ and $\overrightarrow{OB} = \mathbf{b}$.
P is on OA with OP : PA = 1 : 1.
Q is on OB with OQ : QB = 1 : 1.
(a) Find $\overrightarrow{PQ}$ in terms of **a** and **b**.
(b) What do you notice about PQ and AB?

