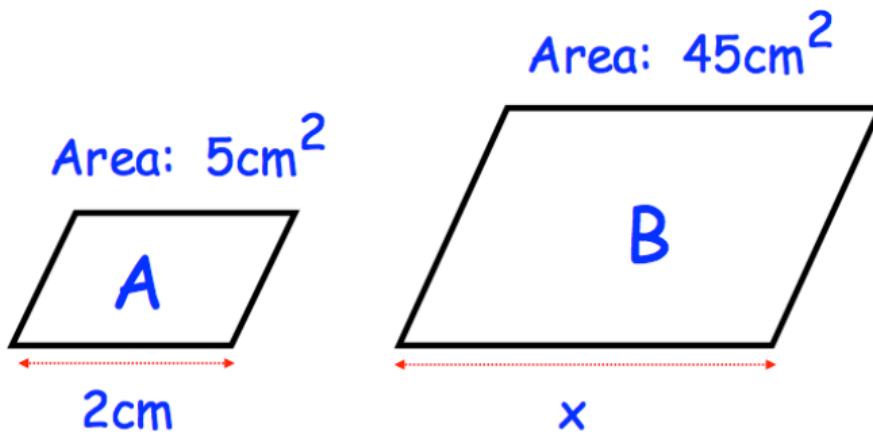


M8 = 16 days to go!

9. Shown below are two mathematically similar parallelograms.



Find x

.....cm
(2)

Solve the equations

$$2x + y = 11$$

$$2x^2 - y^2 = 23$$

2. Natalie has 8 socks in a drawer.

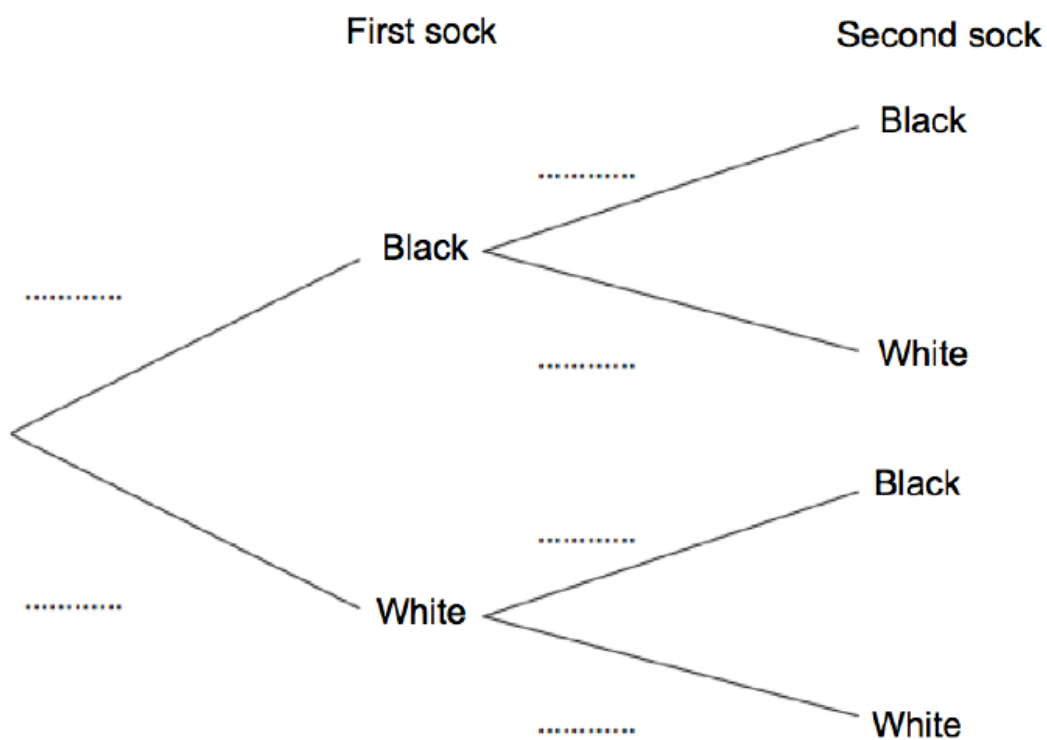
5 of the socks are black.

3 of the socks are white.

Natalie takes out a sock at random, writes down its colour and puts it back into the drawer.

Then Natalie takes out a second sock, at random, and writes down its colour.

(a) Complete the probability tree diagram.



(2)

(b) Work out the probability that the two socks are the same colour.

.....
(2)