

White Rose Problem Solving Challenges

Challenge 1

Rani has 38p.

I have 10p more
than Rani.



I have 20p less
than Eva.

How much money does Eva have?

Challenge 2

If

$$\triangle \times \triangle = 25$$

and

$$\circ \times \circ = 100$$

Work out the value of

$$\triangle \times \circ$$

Challenge 3

A sequence is made up of three 2-digit numbers.

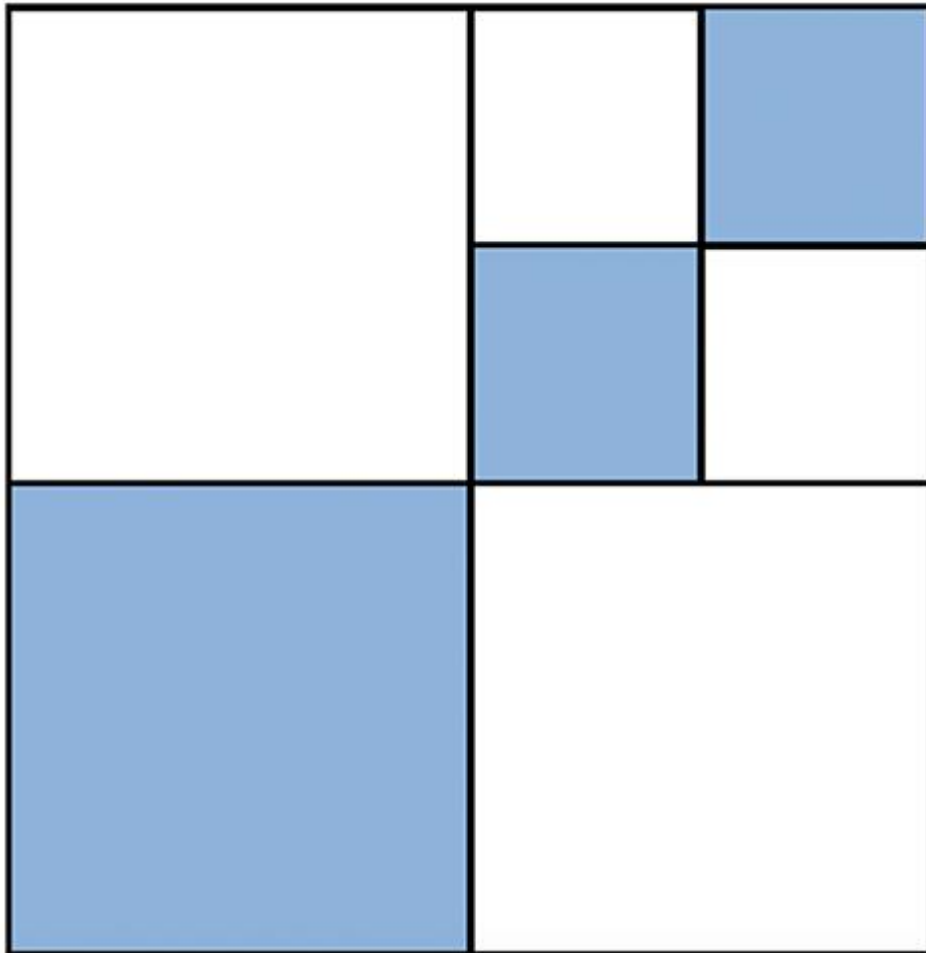
The sequence increases by eight each time. These are the digits that make up the three numbers.



Work out the numbers in the sequence.

Challenge 4

A square is divided into smaller squares.



What fraction of the square is shaded?

Challenge 5

The mass of an empty jar is 470 g.



6 marbles are placed in the jar.



The total mass of the jar and marbles is now 1.1 kg.

Two of the marbles are removed.

What is the mass of the jar and marbles now?

Challenge 6

Work out the value of B.

