Fractions problem solving taken from Nrich.maths.org

Try some of these problems, don't worry if you find some of them too tricky.

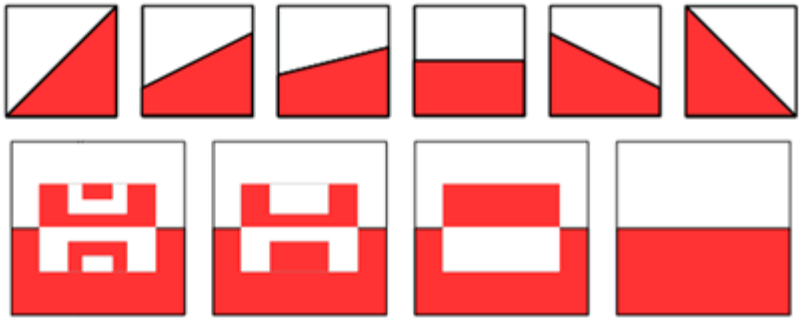
1) Equal parts

Here is a picnic that Petros and Michael are going to share equally.

Can you tell us what each of them will have?

2) Halving

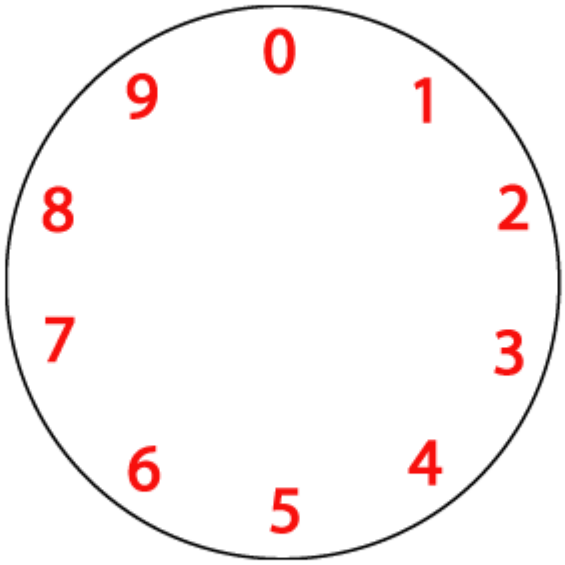
These images show squares split in half:



How might you check that each was correct?
Can you think of more ways to split a square into two halves?

3) Dividing a cake

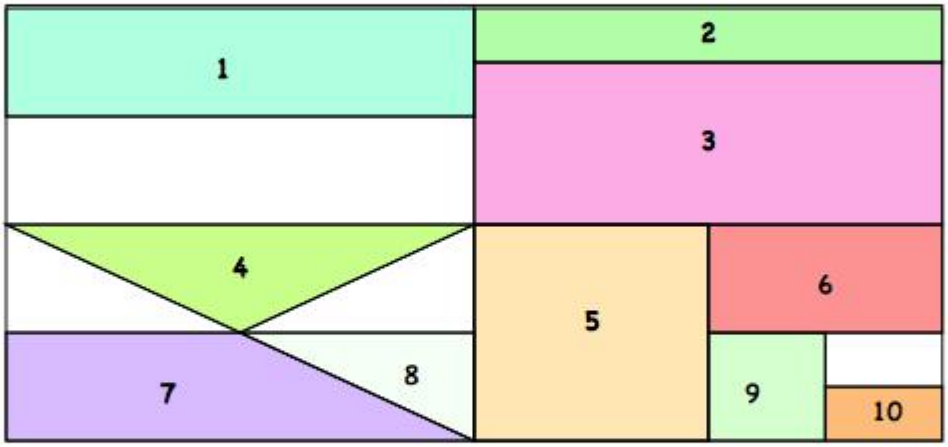
On Annie's ninth birthday her Mum made her a cake which had the figures from 0 to 9 round the edge in red icing instead of candles.



Starting from the centre, Annie cut the cake into 3 pieces with 3 cuts so that the numbers on each piece added to the same total.

Where were the cuts and what fraction of the whole cake was each piece?

4) Rectangle tangle



The large rectangle above is divided into a series of smaller quadrilaterals and triangles. Each of the shapes is a fractional part of the large rectangle.

Can you untangle what fractional part is represented by each of the ten numbered shapes?