## $2 / 3$

## Problem of the Month

## Fractured Numbers

## Level A

Rosita has made a puzzle. She takes a whole rectangle like the one below.


She cuts the whole into half.


She takes that half and cuts it in half.


Finally she takes the small piece she cut and cuts that in half.
Now she has the piece she wants. How many of these small pieces can she put together to make the same size rectangle that she started with? Explain how you know.

If she had cut her small piece in half again, how many of those pieces would be needed to make the first rectangle?

What if she kept going? How would the pieces get smaller?

