

Mathematics

# Array Models

Mr Coward



## Try this

Fill in the blanks in the calculation below using positive integers.

$$36 = \square \times \square$$

Find all possible answers.

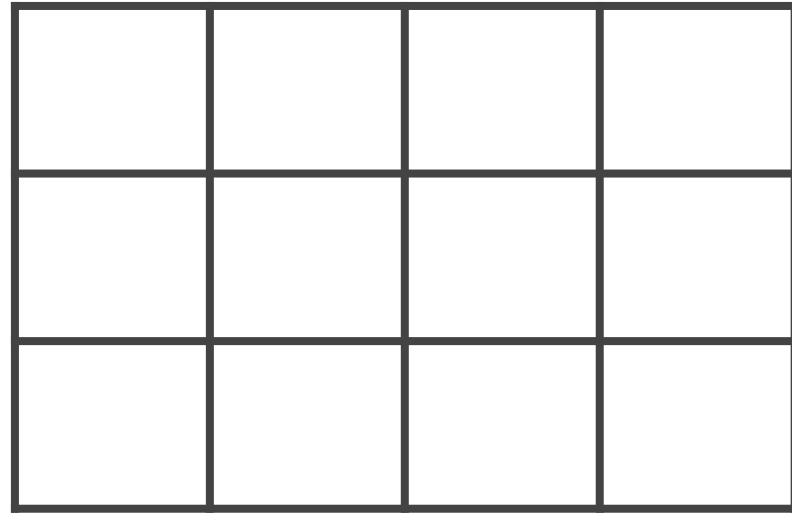
How do you know when you have all possibilities?

How many possibilities are there if non-integers were allowed?



# Independent task

1) Explain how the model can represent each calculation.



$$4 \times 3 = 12$$

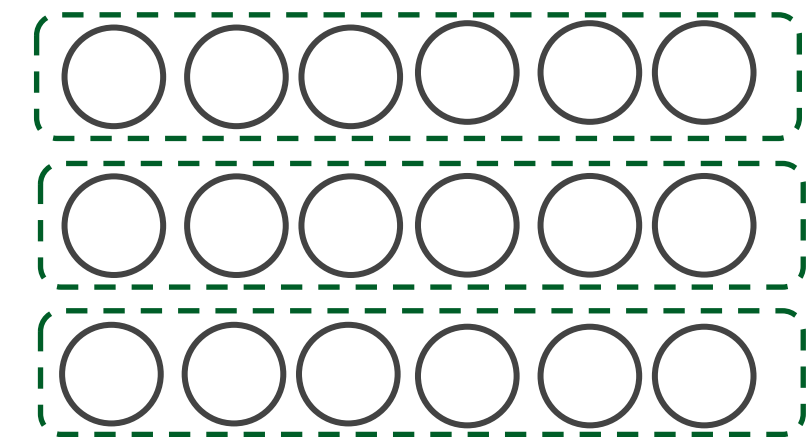
$$3 \times 4 = 12$$

2) Jennie has drawn an array, she has grouped the dots to show  $3 \times 6 = 18$

a) Draw the array, group the dots differently to show this

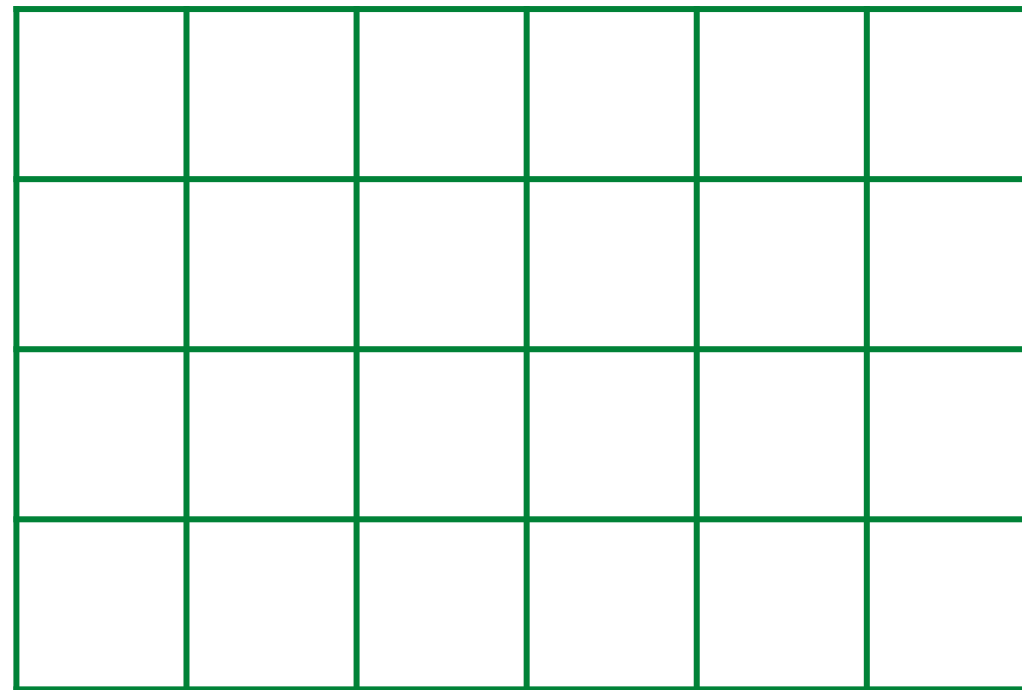
b) By grouping an array in two different ways, show that  $5 \times 2 = 2 \times 5$ .

c) What other calculations can you show using a  $5 \times 2$  array?



# Explore

The array below also represents the number 24.  
Write fact families for this array.



How many other arrays can you draw to represent the number 24?  
Write a fact family for each array

