

## Dividing Fractions Using a Model



When dividing fractions using a model, you will need to make two identical arrays.

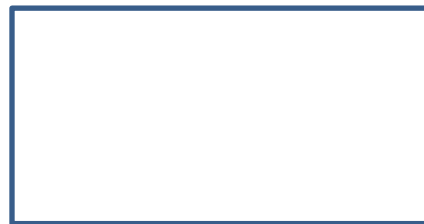
$$\frac{1}{2} \div \frac{1}{4} =$$

Divide in halves horizontally



Color in half of the rectangle

Divide in fourths vertically



Color in a fourth of the rectangle.

Now divide the rectangles so that both arrays have the same area.

How many of the 'boats' on the right will fit into the ocean on the left? \_\_\_\_\_

Let's try again!

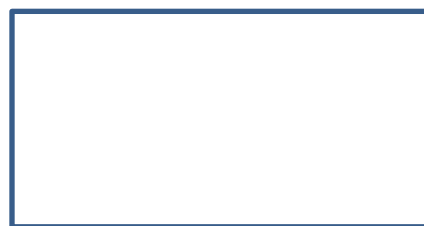
$$\frac{2}{3} \div \frac{1}{6} =$$

Divide in thirds horizontally



Color in  $\frac{2}{3}$  of the rectangle

Divide in sixths vertically



Color in  $\frac{1}{6}$  of the rectangle.

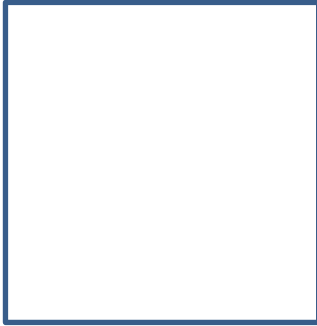
Now divide the rectangles so that both arrays have the same area.

How many of the 'boats' on the right will fit into the ocean on the left? \_\_\_\_\_

Let's see what happens when only part of a boat on the right fits into the ocean.

$$\frac{3}{4} \div \frac{1}{3} =$$

Divide in fourths horizontally



Color in  $\frac{3}{4}$  of the rectangle

Divide in thirds vertically



Color in  $\frac{1}{3}$  of the rectangle.

Now divide the rectangles so that both arrays have the same area.

How many whole 'boats' on the right will fit into the ocean on the left? \_\_\_\_\_

How much of another boat will fit in the remaining space? \_\_\_\_\_ Quotient: \_\_\_\_\_

$$\frac{1}{5} \div \frac{1}{2} =$$

Divide in fifths horizontally



Color in  $\frac{1}{5}$  of the rectangle

Divide in halves vertically



Color in  $\frac{1}{2}$  of the rectangle.

Now divide the rectangles so that both arrays have the same area.

How many whole 'boats' on the right will fit into the ocean on the left? \_\_\_\_\_

How much of another boat will fit in the remaining space? \_\_\_\_\_ Quotient: \_\_\_\_\_