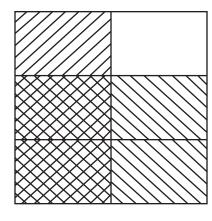
## Shade It In! Multiply Fractions with Area Models

## Steps:



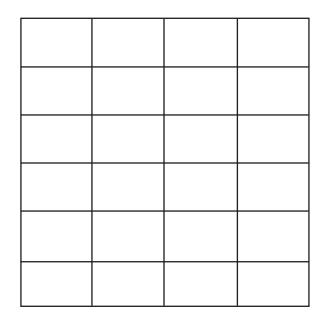


- 1. Draw a square model that represents one whole.
- 2. Divide the model with vertical lines to show one of the fractions you are multiplying (in this example, it is divided into halves).
- 3. Shade in the fraction.
- 4. Divide the same model with horizontal lines to show the other fraction you are multiplying (in this example, it is divided into thirds).
- 5. Shade in the fraction.
- 6. Count the total parts in the model. This is the denominator in the answer. In this example, there are six total parts.
- 7. Count the parts where the shaded portions overlap. This is the numerator in the answer. In this example, two parts have overlapping shading.
- 8. Simplify the answer. In this example,  $\frac{2}{6}$  can be simplified to  $\frac{1}{3}$ .

Shade in the models to solve each problem below.

1. 
$$\frac{4}{5} \times \frac{1}{3} =$$
\_\_\_\_\_

2. 
$$\frac{1}{4} \times \frac{2}{6} =$$



## Shade It In! Multiply Fractions with Area Models

Draw an area model to solve each problem below.

3. 
$$\frac{1}{2} \times \frac{2}{5} =$$
\_\_\_\_\_

4. 
$$\frac{3}{4} \times \frac{1}{3} =$$
\_\_\_\_\_

5. 
$$\frac{1}{6} \times \frac{2}{3} =$$
\_\_\_\_\_

6. 
$$\frac{1}{4} \times \frac{3}{5} =$$

7. As you followed the steps to multiply fractions with area models, what patterns or shortcuts did you find?