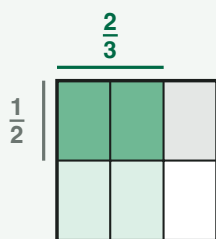


Multiply Fractions: Area Models

Name: _____

Grade 5 · See a fraction of a fraction as the part of a square that is shaded twice

How it works

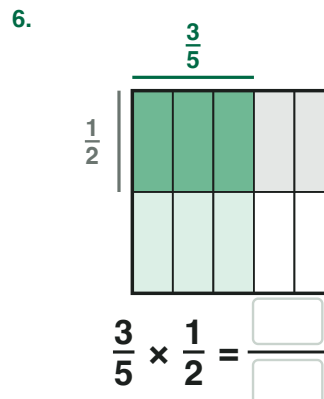
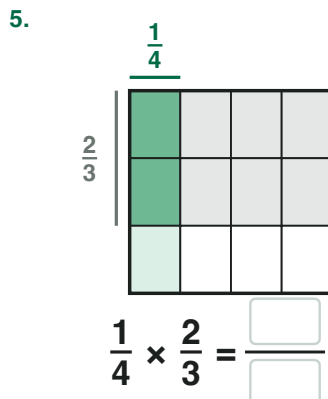
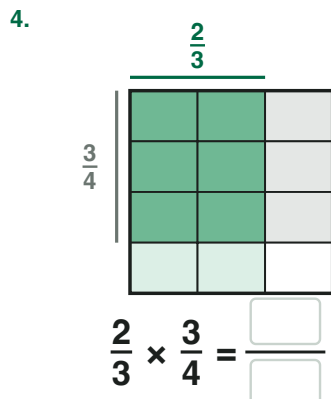
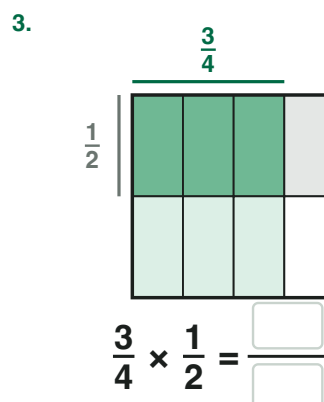
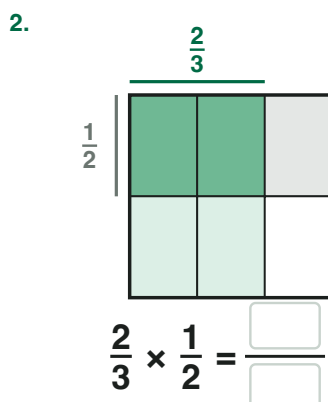
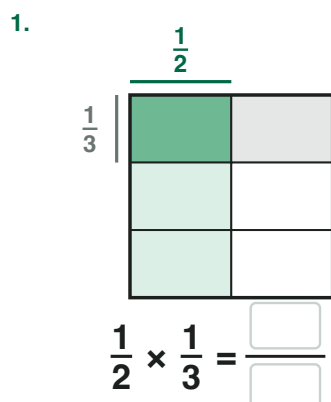


Shade $\frac{2}{3}$ of the square one way, in columns. Shade $\frac{1}{2}$ of it the other way, in rows. The part shaded **twice** is $\frac{1}{2}$ of $\frac{2}{3}$. It is 2 of the 6 equal parts.

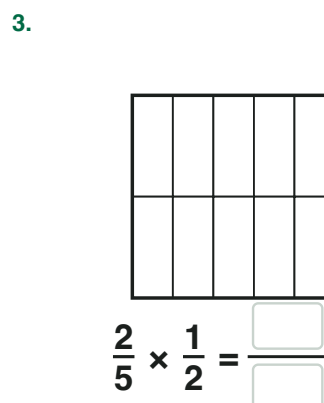
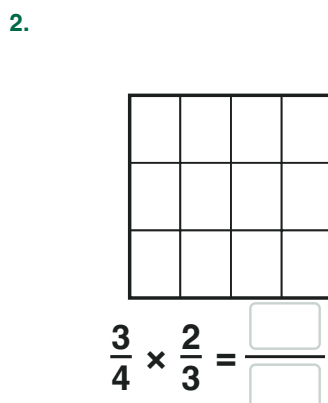
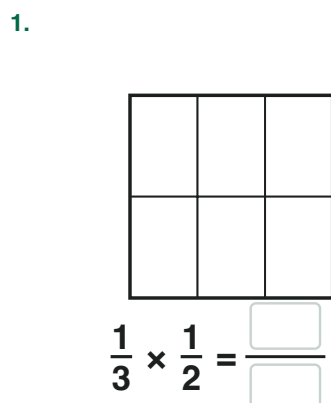
$$\frac{2}{3} \times \frac{1}{2} = \frac{2 \times 1}{3 \times 2} = \frac{2}{6}$$

Multiply the numerators. Multiply the denominators.

A. The darkest part is shaded twice. Write the product.



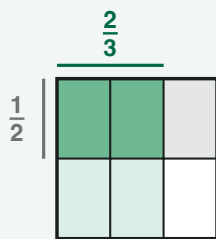
B. Shade the square to show the multiplication. Write the product.



Multiply Fractions: Area Models (Answer Key)

Grade 5 · See a fraction of a fraction as the part of a square that is shaded twice

How it works



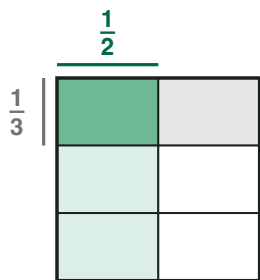
Shade $\frac{2}{3}$ of the square one way, in columns. Shade $\frac{1}{2}$ of it the other way, in rows. The part shaded **twice** is $\frac{1}{2}$ of $\frac{2}{3}$. It is 2 of the 6 equal parts.

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

Multiply the numerators. Multiply the denominators.

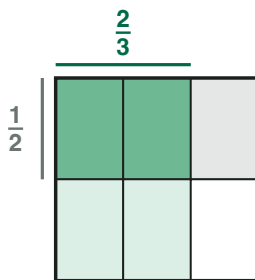
A. The darkest part is shaded twice. Write the product.

1.



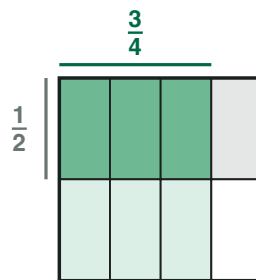
$$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$$

2.



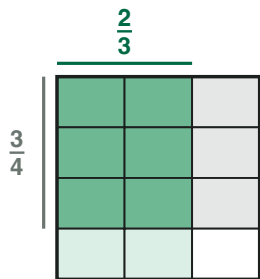
$$\frac{2}{3} \times \frac{1}{2} = \frac{2}{6}$$

3.



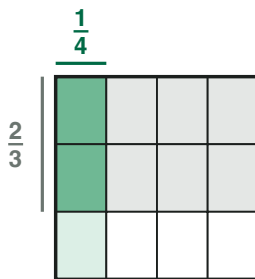
$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

4.



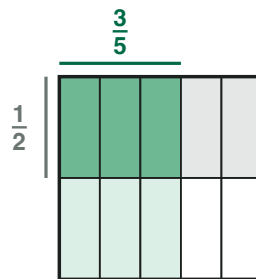
$$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$$

5.



$$\frac{1}{4} \times \frac{2}{3} = \frac{2}{12}$$

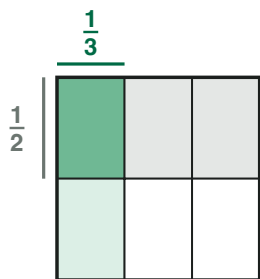
6.



$$\frac{3}{5} \times \frac{1}{2} = \frac{3}{10}$$

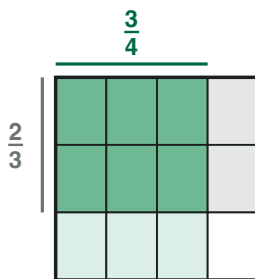
B. Shade the square to show the multiplication. Write the product.

1.



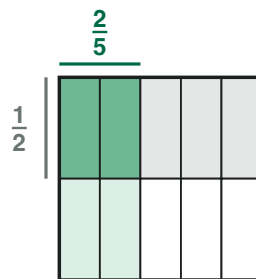
$$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$$

2.



$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

3.



$$\frac{2}{5} \times \frac{1}{2} = \frac{2}{10}$$

An equal fraction is right too. For example, $\frac{6}{12}$ is the same amount as $\frac{1}{2}$.