## Lesson 3: Multiply Unit Fractions

- Let's solve equations.


## Warm-up: Estimation Exploration: How Much is Shaded?

What is the area of the shaded region?


Record an estimate that is:

| too low | about right | too high |
| :---: | :---: | :---: |

## 3.1: Notice Patterns in Expressions



1. Choose one of the diagrams and write a multiplication expression to represent the shaded region. How much of the whole square is shaded? Explain or show your thinking.
2. If the pattern continues, draw what you think the next diagram will look like. Be prepared to explain your thinking.


## 3.2: Write a Multiplication Equation

1. Write a multiplication equation to represent the area of the shaded piece.

2. Explain how the diagram represents the equation $\frac{1}{5} \times \frac{1}{3}=\frac{1}{15}$.

3. Find the value that makes each equation true. Use a diagram, if it is helpful.
a. $\frac{1}{2} \times \frac{1}{6}=$ ?
b. $\frac{1}{4} \times \frac{1}{6}=$ ?
