## Lesson 10: Fractional Side Lengths Less Than 1

- Let's find the area of rectangles with a fractional side length.


## Warm-up: Estimation Exploration: What is the Area?

What is the area of the shaded region?


Record an estimate that is:

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

## 10.1: Rectangle With a Fractional Side Length

Write a multiplication expression to represent the area of each shaded region. Then find the area.
1.

2.

3.


## 10.2: What Are the Side Lengths?

1. Write a multiplication expression to represent the area of the shaded region.

What is the area?

2. Here are two diagrams. Consider each expression and decide whether it represents the shaded region in one of the diagrams. Be prepared to share your thinking.
x

Y

a. $\frac{3}{4} \times 5$
b. $3 \times \frac{3}{5}$
c. $3 \times 4 \times \frac{1}{5}$
d. $4 \times \frac{3}{4}$
e. $3 \times 3 \times \frac{1}{4}$
3. For each diagram, what is the area?

