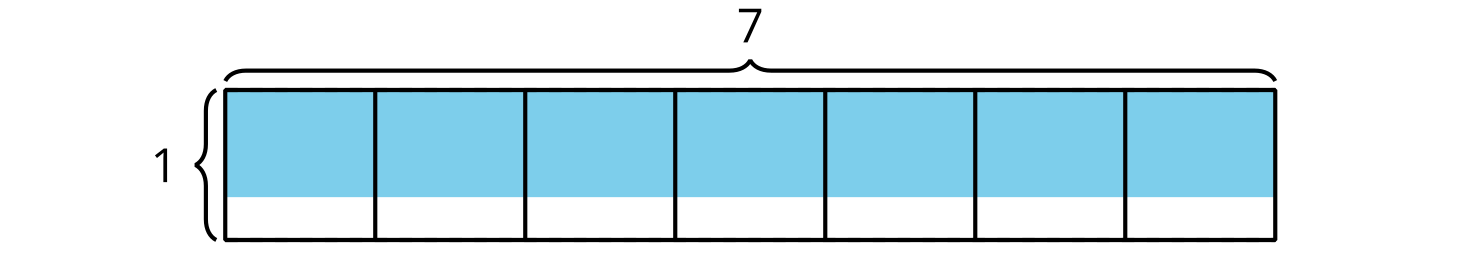
## Lesson 10: Fractional Side Lengths Less Than 1

* 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?



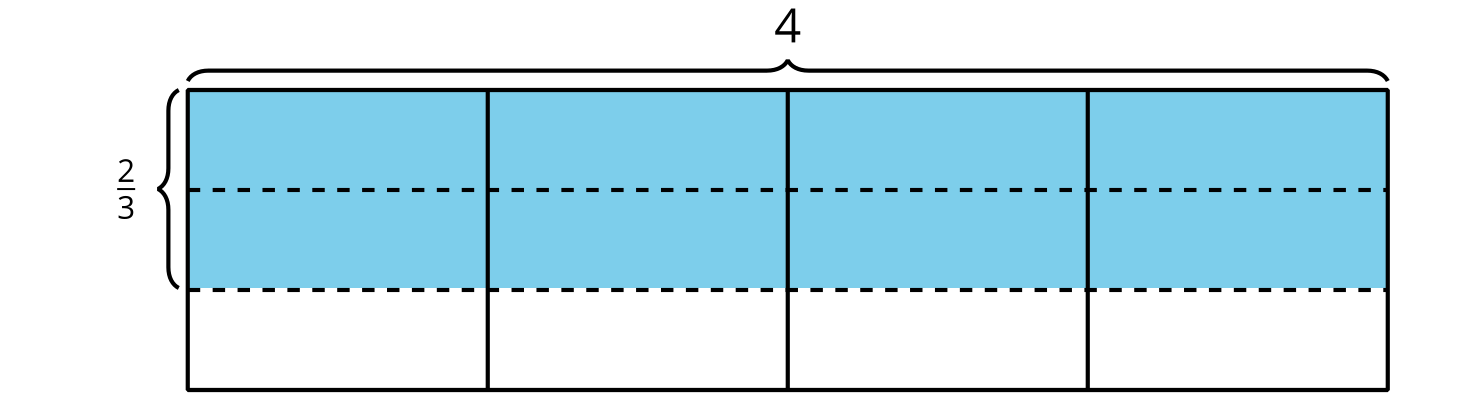
Record an estimate that is:

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

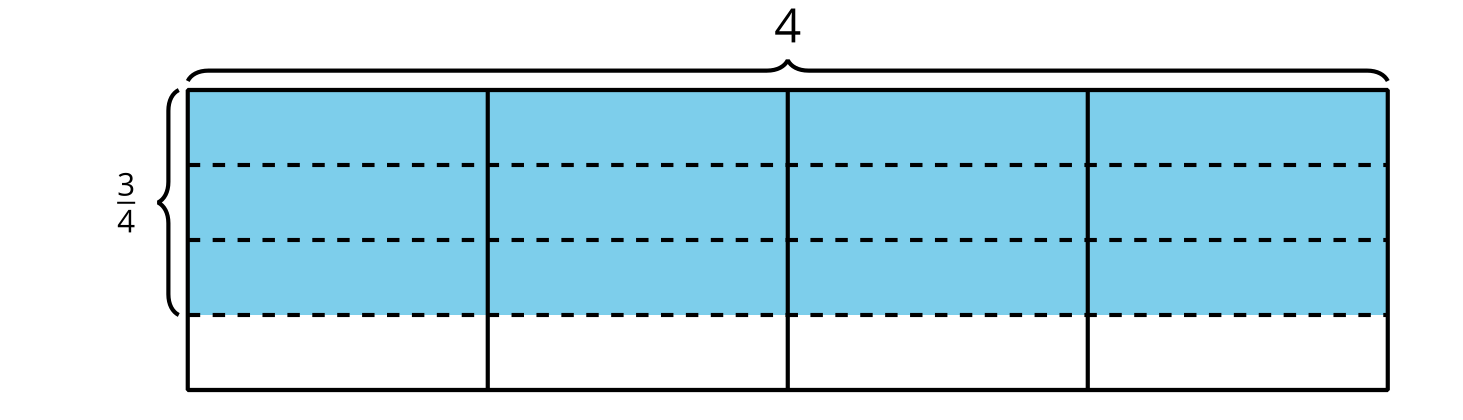
### 10.1: Rectangle With a Fractional Side Length

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

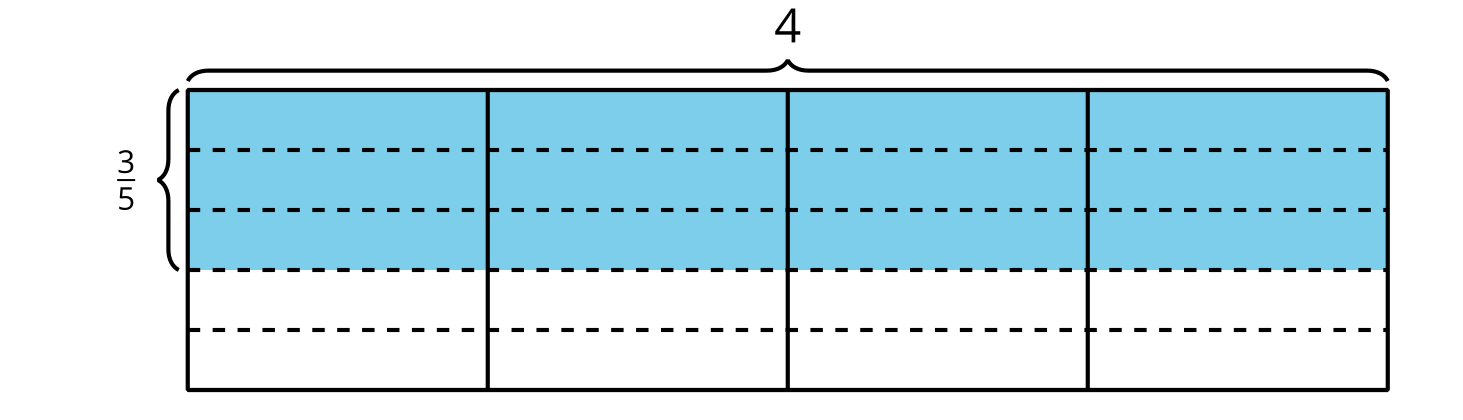


* 



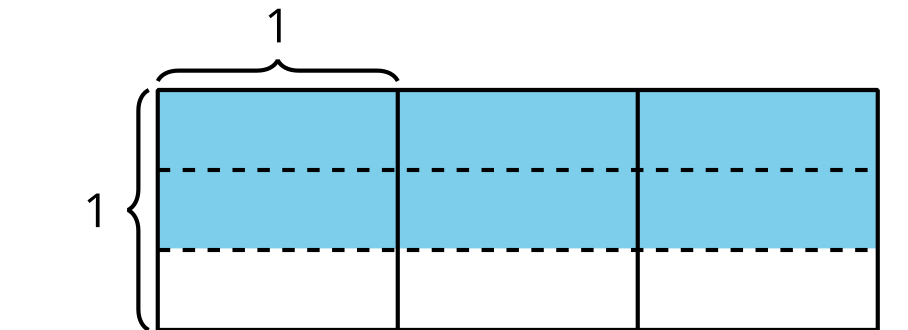
* 



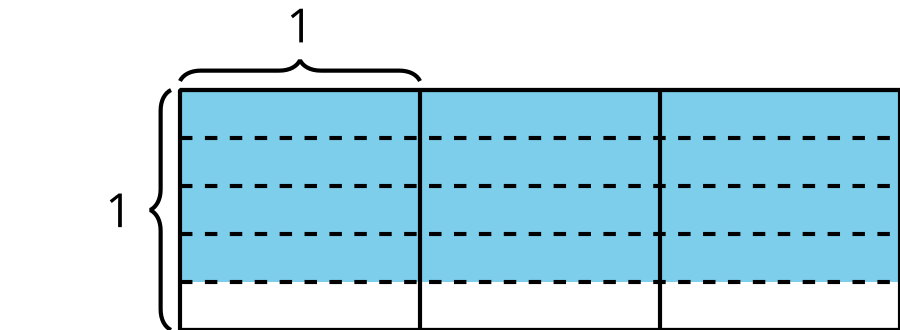
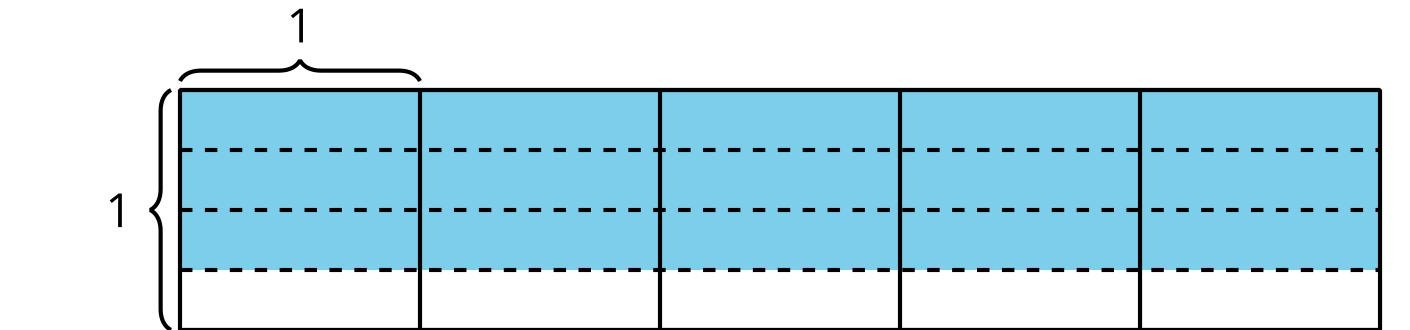
* 

### 10.2: What Are the Side Lengths?

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

* 

1. 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

1. For each diagram, what is the area?



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