

Grade 5 Unit 3

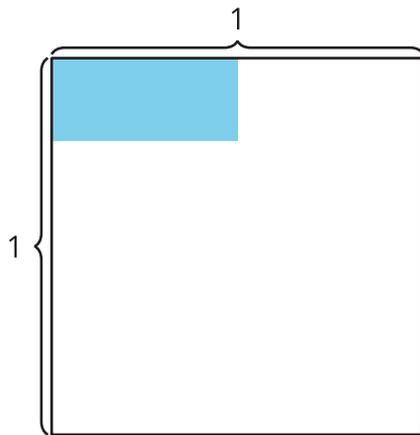
Lesson 3

CC BY 2021 Illustrative Mathematics®

Unit 3 Lesson 3: Multiply Unit Fractions**WU Estimation Exploration: How Much is Shaded? (Warm up)**

Student Task Statement

What is the area of the shaded region?



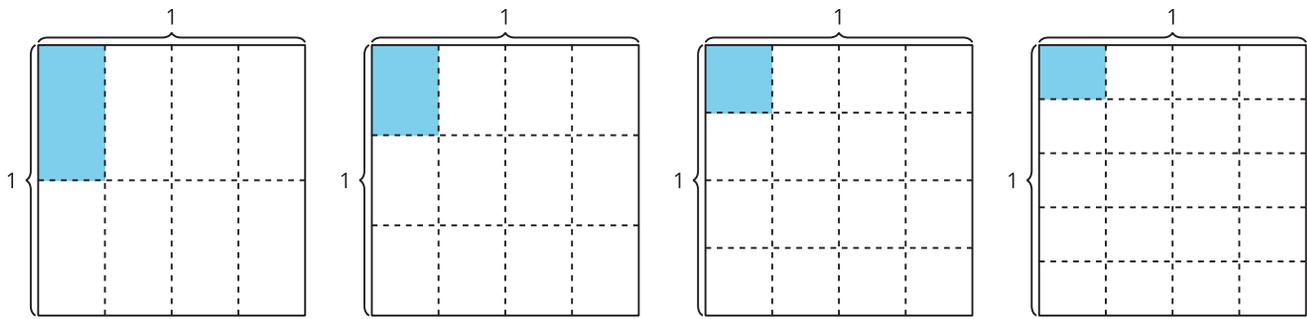
Record an estimate that is:

too low	about right	too high

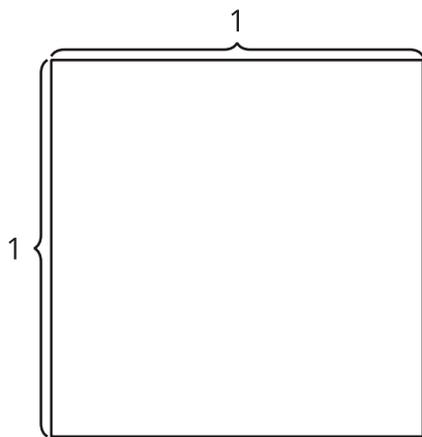
1 Notice Patterns in Expressions

Student Task Statement

A**B****C****D**



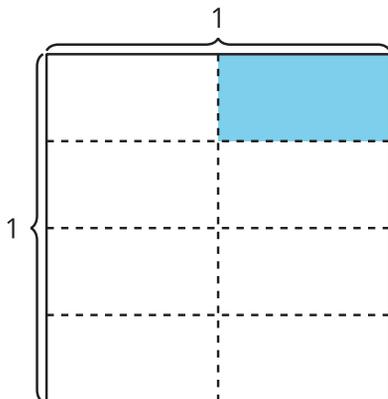
1. Choose one of the diagrams and write a multiplication expression to represent the shaded region. How much of the whole square is shaded? Explain or show your thinking.
2. If the pattern continues, draw what you think the next diagram will look like. Be prepared to explain your thinking.



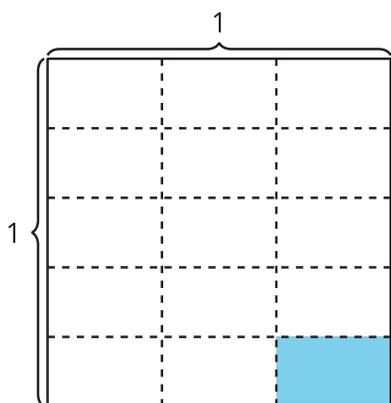
2 Write a Multiplication Equation

Student Task Statement

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