## Lesson 8: Apply Fraction Multiplication

* Let’s solve problems about flags.

### Warm-up: Number Talk: Fraction Multiplication

Find the value of each expression mentally.

### 8.1: Flags



Jada has a small replica of a flag of Thailand.



It is 5 inches wide and inches long.

1. What is the area of the flag? Explain or show your reasoning.
2. Each red stripe is inches wide. What is the area of each red stripe? Explain or show your reasoning.
3. The blue stripe is inches wide. What is the area of the blue stripe? Explain or show your reasoning.

### 8.2: More Flags

Han has a replica of the flag of Colombia.



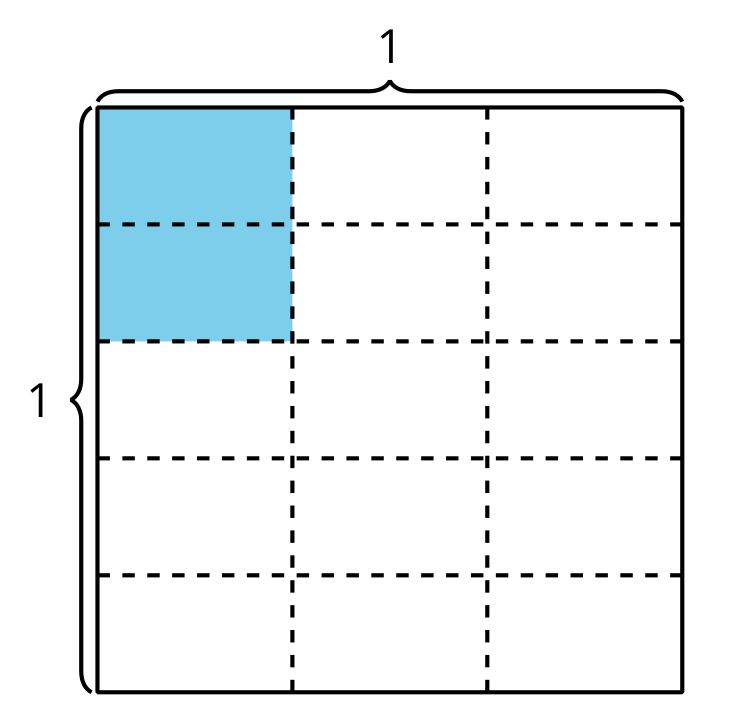
It is inches wide and inches long. The yellow stripe is of the width of the flag and the blue and red stripes are each of the width.

1. . The answer is inch. What is the question?
2. and . The answer is square inches. What is the question?

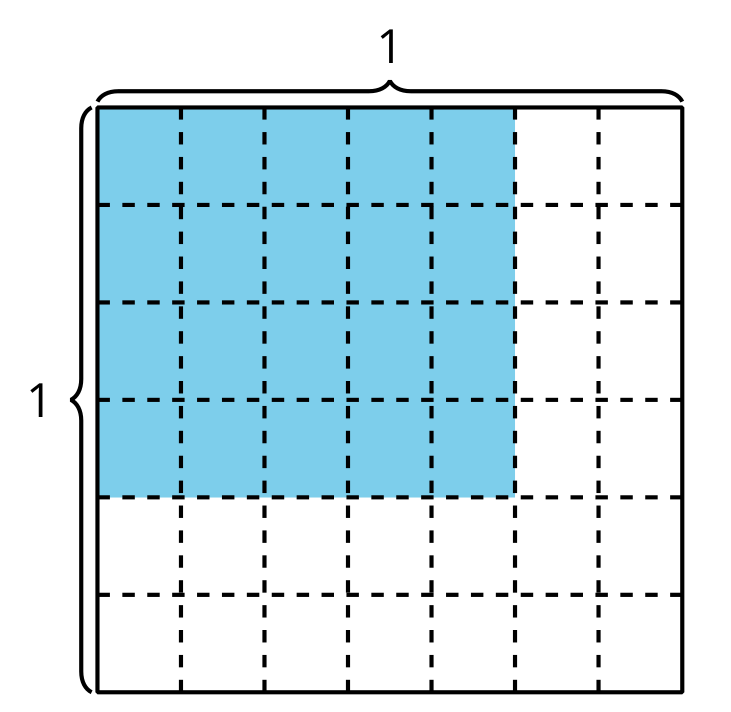
### Section Summary

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In this unit, we learned to multiply fractions. First we learned to multiply unit fractions. For example, we learned that .

A

In diagram A, we can see that of of a square is the same size as of the whole square. Next, we learned how to multiply any fraction by a fraction.

B

In diagram B, we can see that . We can multiply the numerators, to find the numerator in the product. We can multiply the denominators, , to find the denominator in the product. We can represent this relationship with the equation: . Diagram B shows or 20 pieces with or 42 pieces in the whole square.



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