## Unit 4 Lesson 11: Using an Algorithm to Divide Fractions

### 1 Multiplying Fractions (Warm up)

#### Student Task Statement

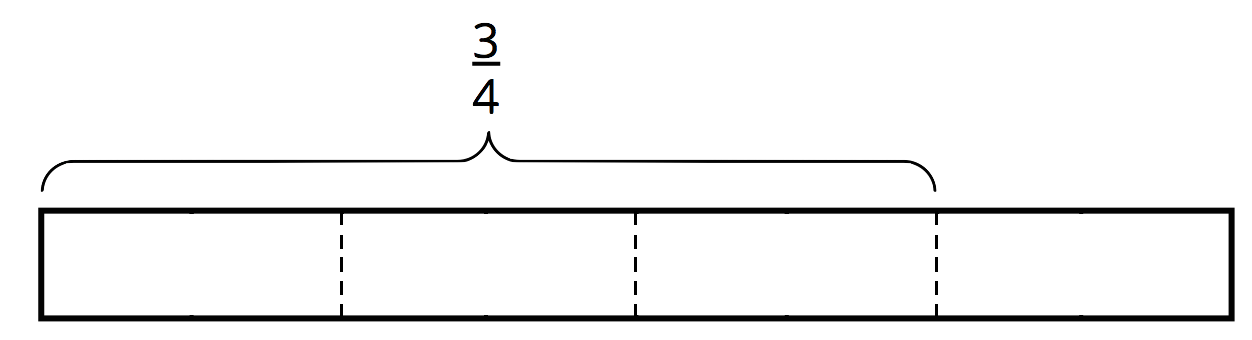
Evaluate each expression.

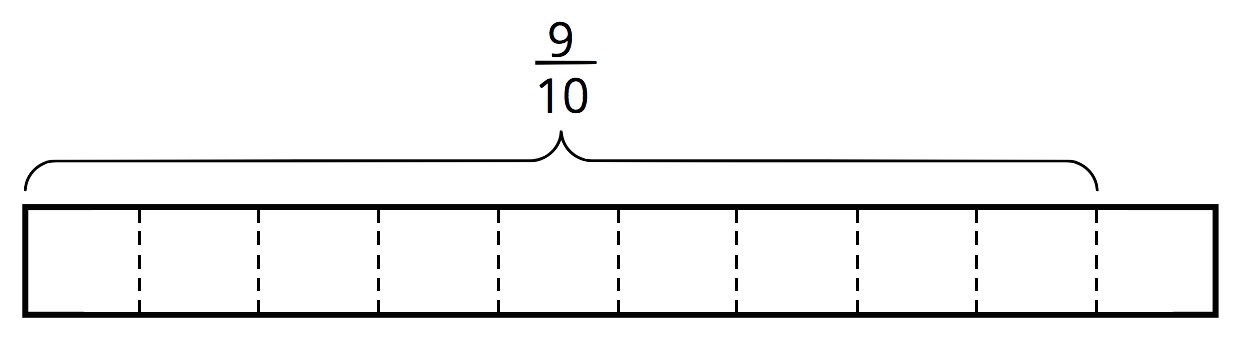
### 2 Dividing a Fraction by a Fraction

#### Student Task Statement

Work with a partner. One person works on the questions labeled “Partner A” and the other person works on those labeled “Partner B.”

1. Partner A: Find the value of each expression by completing the diagram.

   * How many s in ?
   * 

   * How many s in ?
   * 

* Partner B:
* Elena said, “If I want to divide 4 by , I can multiply 4 by 5 and then divide it by 2 or multiply it by .”
* Find the value of each expression using the strategy Elena described.

1. What do you notice about the diagrams and expressions? Discuss with your partner.
2. Complete this sentence based on what you noticed:

* To divide a number by a fraction , we can multiply by \_\_\_\_\_\_\_\_ and then divide the product by \_\_\_\_\_\_\_\_.

1. Select **all** the equations that represent the sentence you completed.

### 3 Using an Algorithm to Divide Fractions

#### Student Task Statement

Calculate each quotient. Show your thinking and be prepared to explain your reasoning.

1. After biking miles, Jada has traveled of the length of her trip. How long (in miles) is the entire length of her trip? Write an equation to represent the situation, and then find the answer.



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