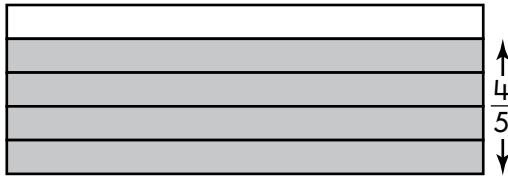


# Multiplying Two Fractions

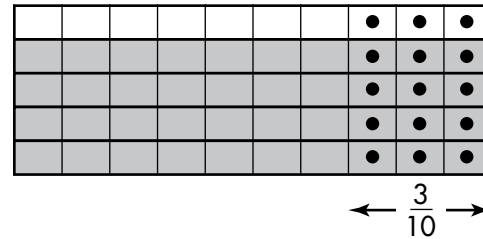
Musa and Karen are riding a bike path that is  $\frac{4}{5}$  mile long. Karen's bike got a flat tire  $\frac{3}{10}$  of the way down the path and she had to stop. How many miles did Karen ride?

You can find the product of two fractions by drawing a diagram.

**Step 1.** Draw a diagram using shading to represent  $\frac{4}{5}$ .



**Step 2.** Draw lines vertically using dots to represent  $\frac{3}{10}$ .



**Step 3.** Count the parts of the diagram that are shaded and dotted. This is the product numerator.

12

**Step 4.** Count the total number of parts of the diagram. This is the product denominator.

50

**Step 5.** Simplify if possible.

$$\frac{12}{50} = \frac{6}{25}$$

Another way to find the product:

**Step 1.** Multiply the numerators:  $4 \times 3 = 12$ .

**Step 2.** Multiply the denominators:  $5 \times 10 = 50$ .

**Step 3.** Simplify if possible:  $\frac{12}{50} = \frac{6}{25}$ .

In **1** through **6**, find the product. Simplify if possible.

1.  $\frac{1}{3} \times \frac{2}{5} =$  \_\_\_\_\_

2.  $\frac{5}{8} \times \frac{1}{4} =$  \_\_\_\_\_

3.  $\frac{5}{6} \times \frac{3}{10} =$  \_\_\_\_\_

4.  $\frac{1}{2} \times 6 =$  \_\_\_\_\_

5.  $14 \times \frac{3}{7} =$  \_\_\_\_\_

6.  $\frac{3}{5} \times \frac{1}{2} \times \frac{6}{7} =$  \_\_\_\_\_

7. Using a diagram, show  $\frac{3}{7} \times \frac{1}{4}$ .