10
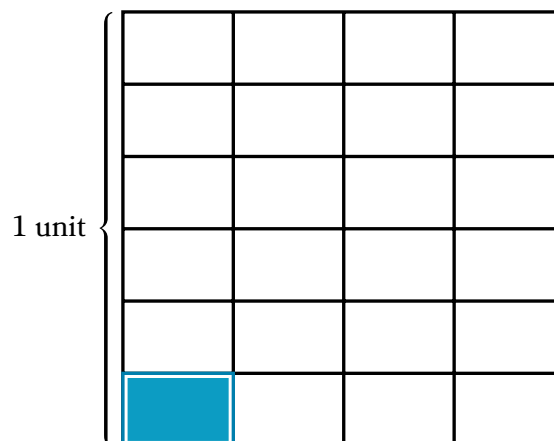
Name _____ Date _____

1. Use this unit square, which is partitioned into equal-size rectangles, to answer parts (a) and (b).

   a. The side lengths of the shaded rectangular tile are _____ unit and _____ unit.

   b. The area of the shaded rectangular tile is _____ square unit because there are _____ equal-size rectangular tiles and 1 is shaded.

2. A rectangle with side lengths of $\frac{1}{5}$ unit and $\frac{1}{3}$ unit is shown. Use the rectangle to complete parts (a)–(c).
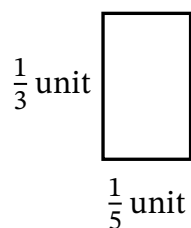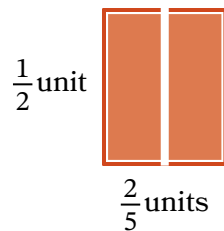
$\frac{1}{3}$ unit ▢

$\frac{1}{5}$ unit

a. Create a unit square. Partition the unit square into equal parts.

b. How many equal parts did you need to create a unit square?

c. What is the area of the rectangular tile with side lengths of $\frac{1}{5}$ unit and $\frac{1}{3}$ unit? How do you know?

3. A rectangle with side lengths of $\frac{3}{4}$ units and $\frac{1}{6}$ unit is shown. Use the rectangle to complete parts (a)–(c).
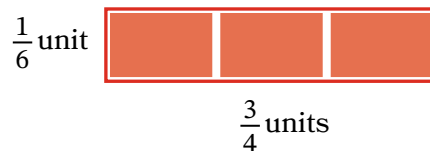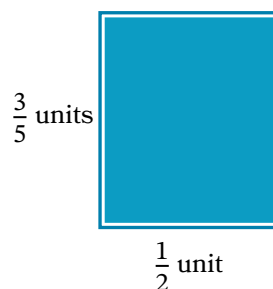
$\frac{1}{6}$ unit

$\frac{3}{4}$ units

a. Create a unit square. Partition the unit square into equal parts.

b. How many equal parts did you need to create a unit square?

c. What is the area of the rectangle with side lengths of $\frac{3}{4}$ units and $\frac{1}{6}$ unit?

4. A rectangle with side lengths of $\frac{2}{5}$ units and $\frac{1}{2}$ unit is shown. Use the rectangle to complete parts (a)–(c).

$\frac{1}{2}$ unit

$\frac{2}{5}$ units

a. Create a unit square. Partition the unit square into equal parts.

b. How many equal parts do you need to create a unit square?

c. What is the area of the rectangle with side lengths of $\frac{2}{5}$ units and $\frac{1}{2}$ unit?
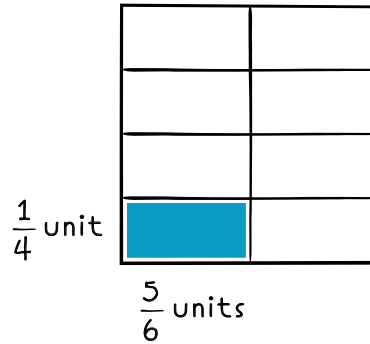
5. What is the area of the rectangle shown?

$\frac{3}{5}$ units

$\frac{1}{2}$ unit

6. Sana creates a drawing to determine the area of a rectangle with a side length of $\frac{5}{6}$ units and a side length of $\frac{1}{4}$ unit.

Sana says the area of the rectangle is $\frac{1}{8}$ square unit.

Is she correct? Why?