Name \_\_\_\_\_

a.

Date \_\_\_\_\_

Each rectangle represents 1.

1. The shaded fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you.

b.





c.







- 2. Decompose the shaded fractions into smaller units, as given below. Express the equivalent fractions in a number sentence using multiplication.
  - a. Decompose into tenths.



b. Decompose into fifteenths.





Lesson 8:

Use the area model and multiplication to show the equivalence of two fractions.



3. Draw area models to prove that the following number sentences are true.

a. 
$$\frac{2}{5} = \frac{4}{10}$$
 b.  $\frac{2}{3} = \frac{8}{12}$ 

c. 
$$\frac{3}{6} = \frac{6}{12}$$
 d.  $\frac{4}{6} = \frac{8}{12}$ 

- 4. Use multiplication to find an equivalent fraction for each fraction below.
  - a.  $\frac{3}{4}$  b.  $\frac{4}{5}$
  - c.  $\frac{7}{6}$  d.  $\frac{12}{7}$
- 5. Determine which of the following are true number sentences. Correct those that are false by changing the right-hand side of the number sentence.

a. 
$$\frac{4}{3} = \frac{8}{9}$$
 b.  $\frac{5}{4} = \frac{10}{8}$ 

c. 
$$\frac{4}{5} = \frac{12}{10}$$
 d.  $\frac{4}{6} = \frac{12}{18}$ 

Use the area model and multiplication to show the equivalence of two fractions.

