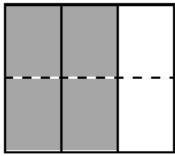
Name _____ Date _____

Each rectangle represents 1.

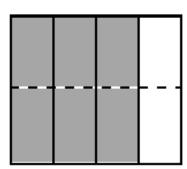
1. The shaded fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you.

a.

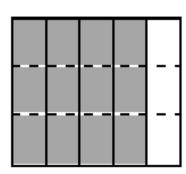


$$\frac{2}{3} = \frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

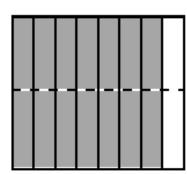
b.



c.



d.

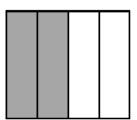


2. Decompose both shaded fractions into twelfths. Express the equivalent fractions in a number sentence using multiplication.

a.



b.



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.
$$\frac{1}{3} = \frac{2}{6}$$

b.
$$\frac{2}{5} = \frac{4}{10}$$

c.
$$\frac{5}{7} = \frac{10}{14}$$

d.
$$\frac{3}{6} = \frac{9}{18}$$

4. Use multiplication to create an equivalent fraction for each fraction below.

a.
$$\frac{2}{3}$$

b.
$$\frac{5}{6}$$

c.
$$\frac{6}{5}$$

d.
$$\frac{10}{8}$$

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.
$$\frac{2}{3} = \frac{4}{9}$$

b.
$$\frac{5}{6} = \frac{10}{12}$$

c.
$$\frac{3}{5} = \frac{6}{15}$$

d.
$$\frac{7}{4} = \frac{21}{12}$$

Lesson 8:

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

