

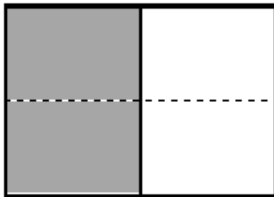
Name _____

Date _____

Each rectangle represents 1.

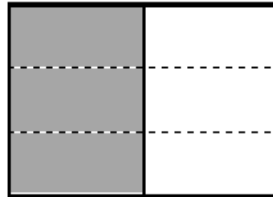
1. The shaded unit fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you.

a.

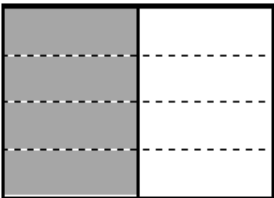


$$\frac{1}{2} = \frac{1 \times 2}{2 \times 2} = \frac{2}{4}$$

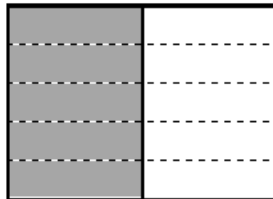
b.



c.

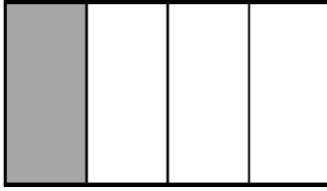


d.

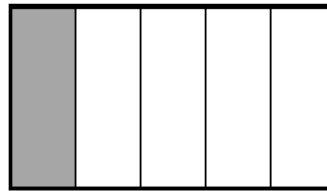


2. Decompose the shaded fractions into smaller units using the area models. Express the equivalent fractions in a number sentence using multiplication.

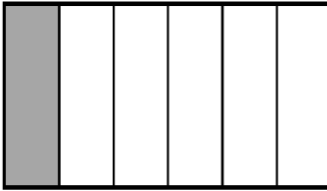
a.



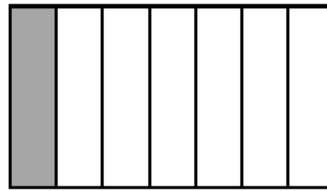
b.



c.



d.



- e. What happened to the size of the fractional units when you decomposed the fraction?
- f. What happened to the total number of units in the whole when you decomposed the fraction?

3. Draw three different area models to represent $\frac{1}{3}$ by shading.
Decompose the shaded fraction into (a) sixths, (b) ninths, and (c) twelfths.
Use multiplication to show how each fraction is equivalent to $\frac{1}{3}$.

a.

b.

c.