Lesson 5.1C ~ Multiplying Fractions with Models
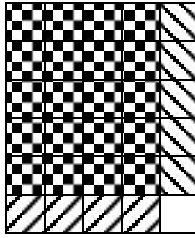
Name_____ Period_____ Date_____

To multiply three or more fractions:

$$\frac{5}{6}\times\frac{4}{5}\times\frac{1}{2}=?\qquad \frac{5}{6}\times\frac{4}{5}=\frac{20}{30}=\frac{2}{3}$$

$$\frac{2}{3}\times\frac{1}{2}=\frac{2}{6}=\frac{1}{3}\qquad \frac{5}{6}\times\frac{4}{5}\times\frac{1}{2}=\frac{1}{3}$$

Use a model to multiply the first two fractions. Simplify your answer.

Use a model to multiply first simplified answer by third fraction. Simplify your answer.

Use the squares provided to draw models to match each expression. Find each product. Write all products in simplest form.

1. $\dfrac{3}{4}\times\dfrac{2}{3}=\bigcirc$ ☐ $\bigcirc\times\dfrac{1}{2}=\diamond$ ☐ $\dfrac{3}{4}\times\dfrac{2}{3}\times\dfrac{1}{2}=\diamond$

Simplified product

2. $\dfrac{2}{5}\times\dfrac{1}{2}=\bigcirc$ ☐ $\bigcirc\times\dfrac{5}{6}=\diamond$ ☐ $\dfrac{2}{5}\times\dfrac{1}{2}\times\dfrac{5}{6}=\diamond$

3. $\dfrac{1}{6}\times\dfrac{3}{4}=\bigcirc$ ☐ $\bigcirc\times\dfrac{2}{3}=\diamond$ ☐ $\dfrac{1}{6}\times\dfrac{3}{4}\times\dfrac{2}{3}=\diamond$

4. $\dfrac{3}{5}\times\dfrac{1}{3}=\bigcirc$ ☐ $\bigcirc\times\dfrac{5}{7}=\diamond$ ☐ $\dfrac{3}{5}\times\dfrac{1}{3}\times\dfrac{5}{7}=\diamond$