Name _____ Period _____

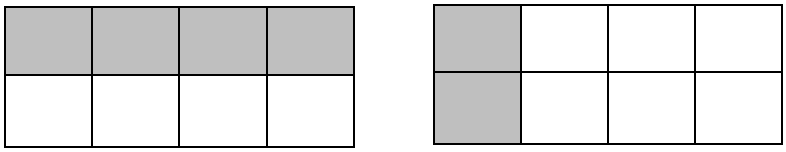
Model Drawing: Dividing a Fraction by a Fraction

1) $\frac{1}{2} \div \frac{1}{4} =$ _____

How many times does the divisor go into the dividend?

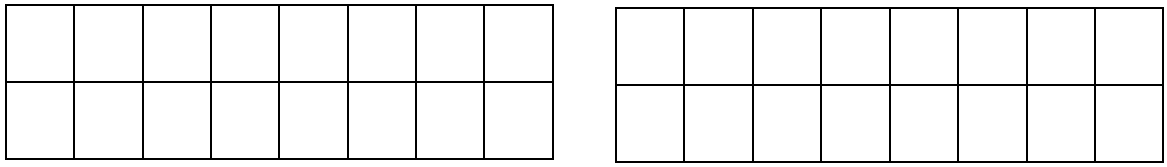
Start with two 2 by 4 rectangular wholes.

Shade in $\frac{1}{2}$ horizontally in the first rectangle.
Then, shade $\frac{1}{4}$ vertically in the second rectangle.



How many times does the second fraction go into the first fraction?

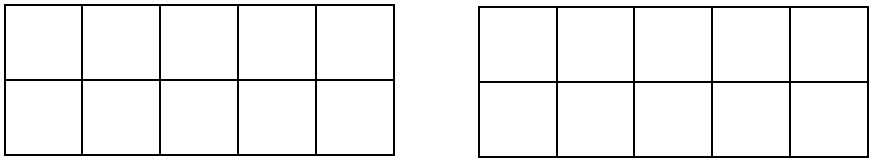
2) $\frac{1}{2} \div \frac{3}{8} =$ _____



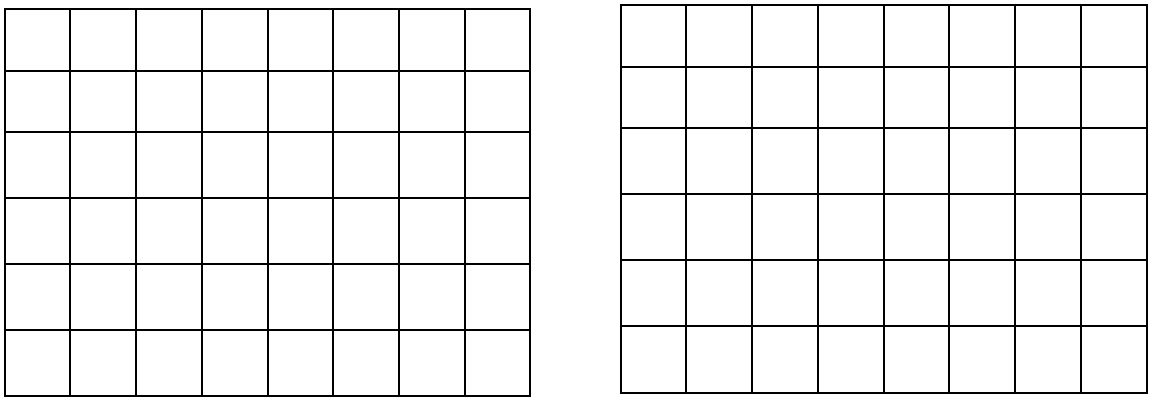
Shade in $\frac{1}{2}$ in one and $\frac{3}{8}$ in the other.

How many times does the second fraction go into the first fraction?

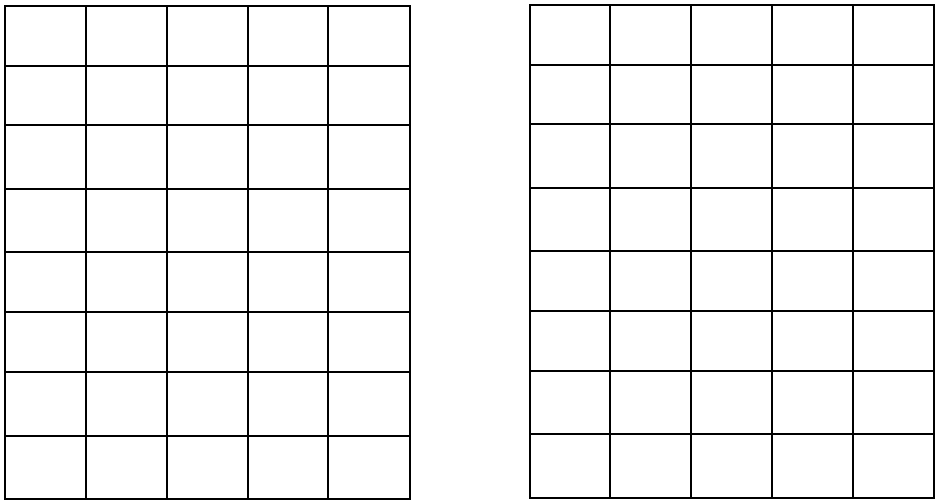
3) $\frac{1}{2} \div \frac{1}{5} =$ _____



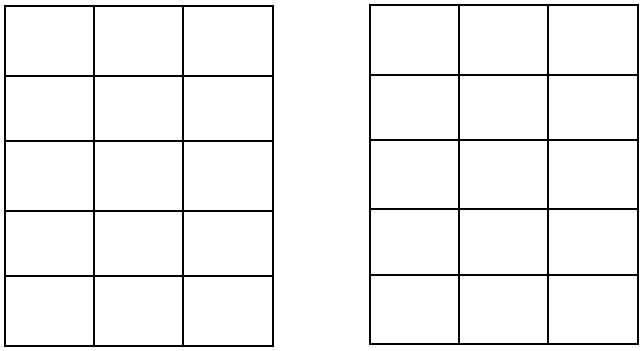
4) $\frac{5}{6} \div \frac{1}{8} =$ _____



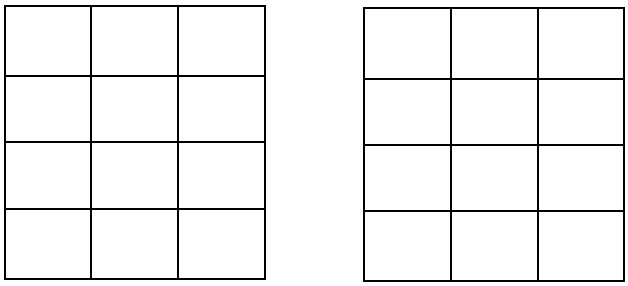
5) $\frac{5}{8} \div \frac{1}{5} =$ _____



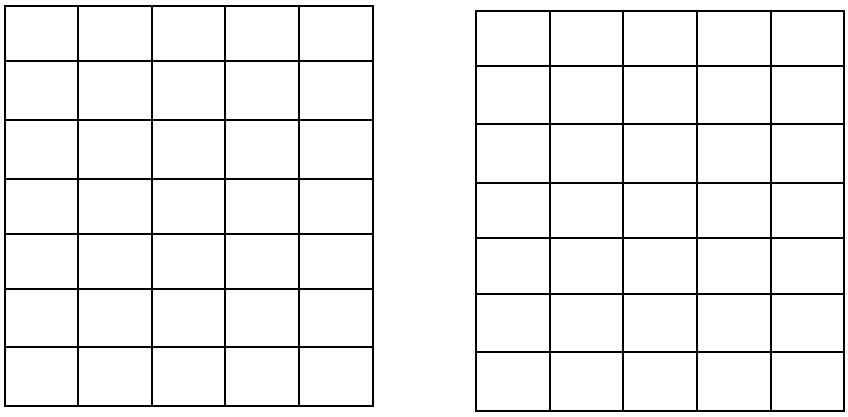
6) $\frac{3}{5} \div \frac{2}{3} =$ _____



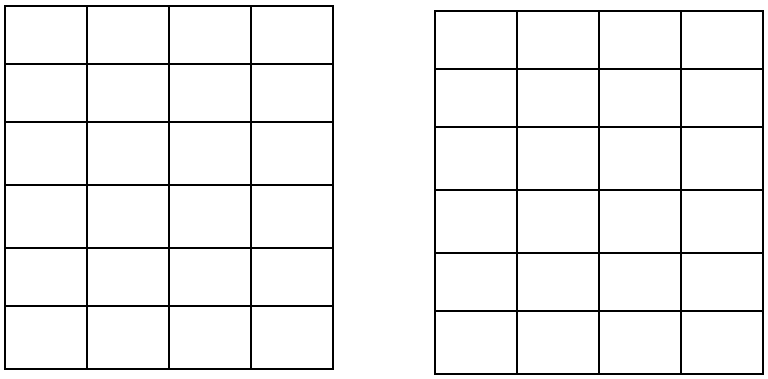
7) $\frac{2}{4} \div \frac{1}{3} =$ _____



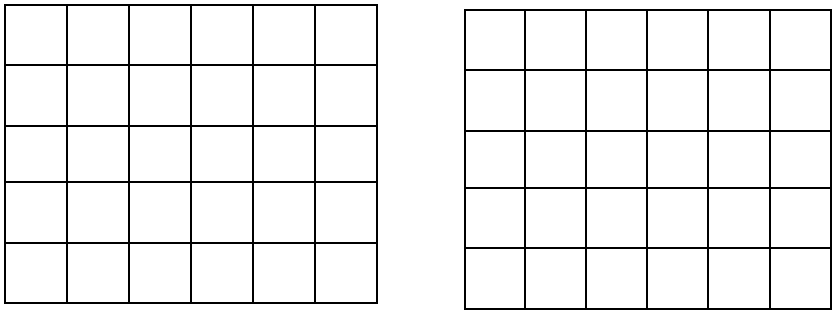
8) $\frac{3}{7} \div \frac{2}{5} =$ _____



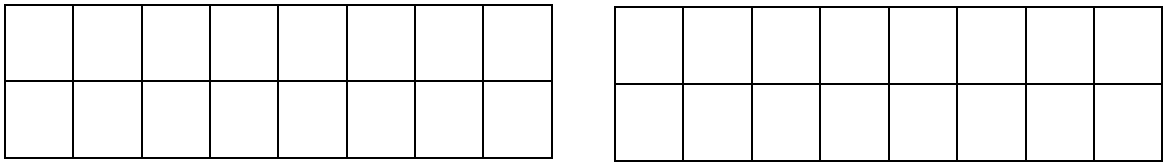
9) $\frac{5}{6} \div \frac{3}{4} =$ _____



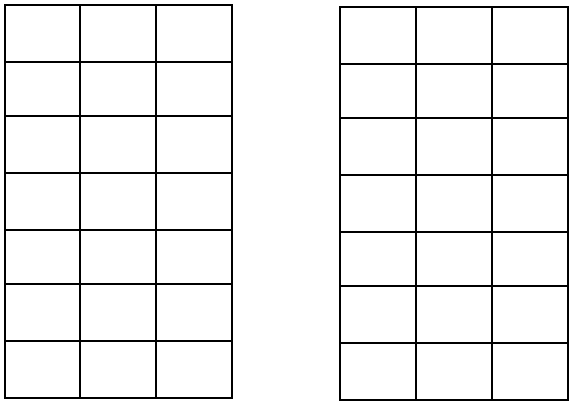
10) $\frac{4}{5} \div \frac{1}{6} =$ _____



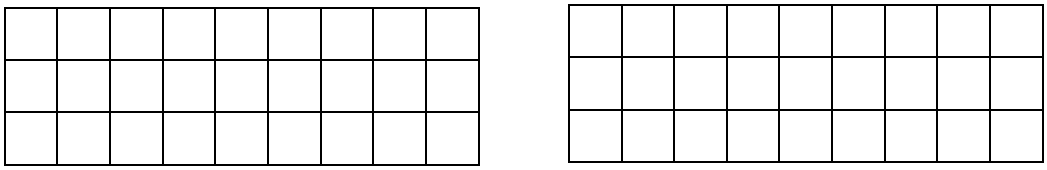
11) $\frac{1}{2} \div \frac{7}{8} =$ _____



12) $\frac{5}{7} \div \frac{1}{3} =$ _____



13) $\frac{1}{3} \div \frac{2}{9} =$



Review Steps for Fraction Modeling:

1) Start with 2 identical rectangles, one for the dividend with rows equal to the denominator of the divisor and one for the divisor with columns equal to the denominator of the dividend.

2) Shade the first rectangle horizontally with the dividend. Shade the second rectangle vertically with the divisor.

3) Find out how many times the second fraction (divisor) goes into the first fraction (dividend).

3) The number of squares shaded in the first rectangle is the numerator and the number of squares shaded in the second rectangle is the denominator.

4) Simplify your answer.