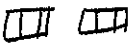
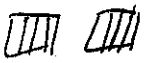
Date: _____

Investigating Dividing Fractions

Use paper cutting to show the following divisions and fill in the table as you go:

Division Statement	Total #of pieces	Visual diagram	Can this situation be represented by another operation other than division?
$2 \div \frac{1}{2}$	4		2x2
$2 \div \frac{1}{3}$	6		2x3
$2 \div \frac{1}{4}$	8		2x4

Reciprocals: two numbers that have a product of 1

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

$= 1$

To Divide Fractions:

① creat the recipical (invert) of the 2nd fraction

ex: $\frac{3}{4} \div \frac{2}{5}$ ② change "÷" to "×" $= \frac{3 \times 5}{4 \times 2}$

$= \frac{3}{4} \times \frac{5}{2}$ ③ multiply fractions $= \frac{15}{8}$

Try a few:

$\frac{7}{8} \div \frac{3}{4}$ $= \frac{7}{8} \times \frac{4}{3} = \frac{28 \div 4}{24 \div 4}$ $= \frac{7 \times 4}{8 \times 3} = \frac{7}{6}$	$\frac{3}{5} \div 3$ $= \frac{3}{4} \times \frac{1}{3}$ $= \frac{3}{12}$	$\frac{1}{2} \div \frac{1}{3}$ $= \frac{1}{2} \times \frac{3}{1} = \frac{3}{2}$ $\frac{1}{2} \div \frac{1}{3} =$

Textbook work p94 #3-9