

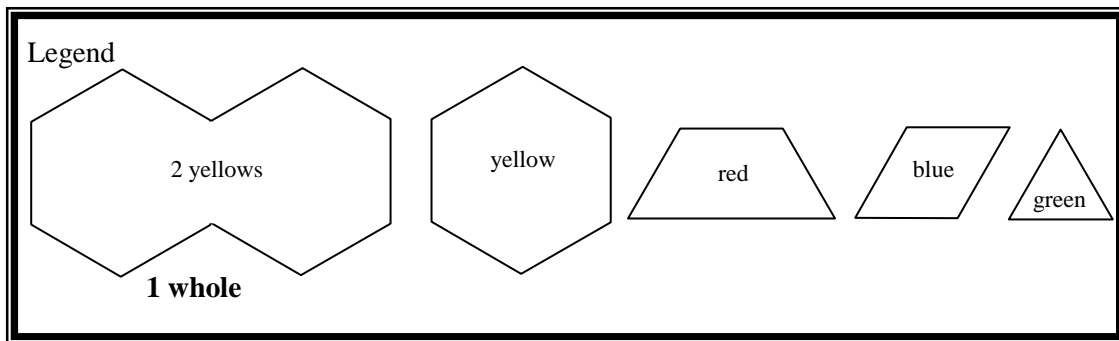
Math 365 Lecture Notes Section 5.3 (Part 2) – Division of Rational Numbers

★ Activity 1 (Dividing Fractions)

$3 \div \frac{1}{2}$ means _____, so $3 \div \frac{1}{2} =$ _____.

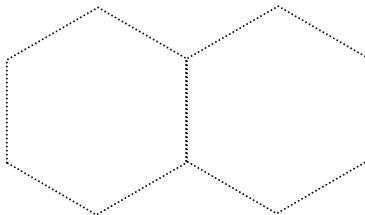
$\frac{1}{3} \div \frac{1}{6}$ means _____, so $\frac{1}{3} \div \frac{1}{6} =$ _____.

$\frac{1}{2} \div \frac{1}{8}$ means _____, so $\frac{1}{2} \div \frac{1}{4} =$ _____.

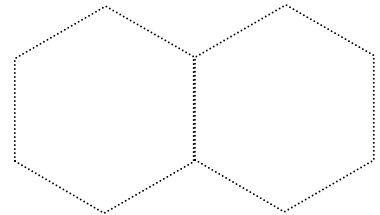


Use pattern block to help solve the following. Record your solution both pictorially and numerically.

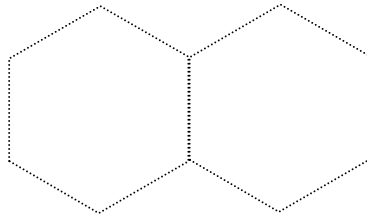
1) $\frac{1}{2} \div \frac{1}{4}$



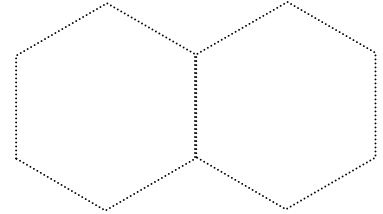
2) $\frac{5}{6} \div \frac{5}{12}$



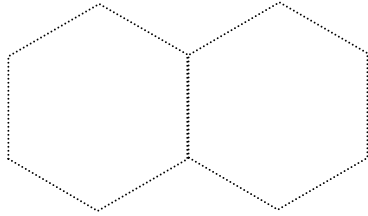
3) $\frac{3}{2} \div \frac{3}{4}$



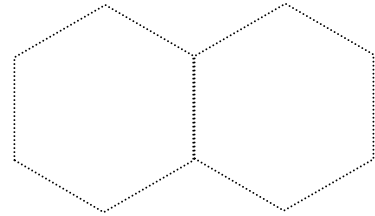
4) $\frac{5}{4} \div \frac{1}{12}$



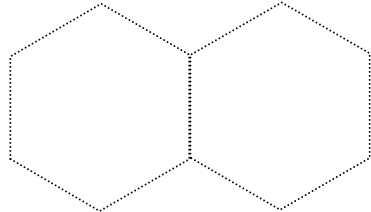
5) $\frac{3}{2} \div \frac{1}{6}$



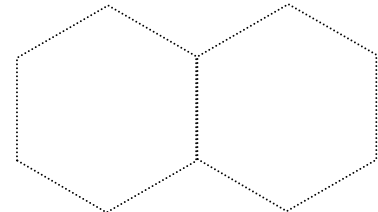
6) $\frac{1}{2} \div \frac{1}{3}$



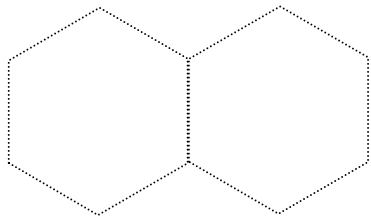
7) $\frac{5}{6} \div \frac{1}{3}$



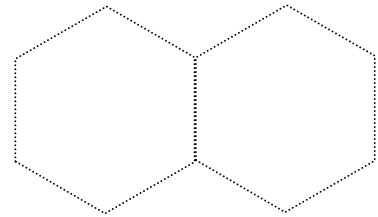
8) $\frac{2}{3} \div \frac{1}{2}$



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



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



Record your answers below.

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

$$\frac{5}{6} \div \frac{5}{12} =$$

$$\frac{3}{2} \div \frac{3}{4} =$$

$$\frac{5}{4} \div \frac{1}{12} =$$

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

$$\frac{1}{2} \div \frac{1}{3} =$$

$$\frac{5}{6} \div \frac{1}{3} =$$

$$\frac{2}{3} \div \frac{1}{2} =$$

$$1\frac{1}{3} \div \frac{1}{2} =$$

$$\frac{5}{4} \div \frac{1}{6} =$$

Describe the process of dividing fractions without using pattern blocks.

3. $\frac{4}{9} \times 27$

4. Give an estimate of the quotient of $24\frac{2}{3}$ and $11\frac{5}{6}$.

5. Jasmine has finished reading $\frac{3}{4}$ of the book and has 85 pages left to read. How many pages has she read?

6. Solve for x, where x is a rational number: $4^{2x} < 32$

★ **Review the Rules of Exponents!**