

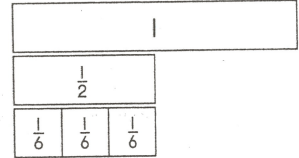
Name _____

Homework

Model Fraction Division

Use fraction strips to find $\frac{1}{2} \div 3$.

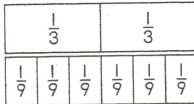
Step 1 $\frac{1}{2} \div 3$ can mean divide $\frac{1}{2}$ into 3 equal parts and find how much is in each part. Find a fraction strip such that 3 of that strip make the same length as a single $\frac{1}{2}$ -strip.



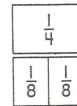
Step 2 There are three $\frac{1}{6}$ -strips in $\frac{1}{2}$, so $\frac{1}{2} \div 3 = \frac{1}{6}$.

Use the model to find the quotient.

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



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



Draw a model with fraction strips. Then find the quotient.

3. $\frac{3}{4} \div 6$

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

$\frac{3}{4} \div 6 =$ _____

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

Name _____

Divide Fractions

You can multiply by reciprocals to divide fractions.

Write the reciprocal of $\frac{1}{7}$.

To find the reciprocal of a number, switch the numerator and the denominator.

$$\frac{1}{7} \times \frac{7}{1} = 1$$

Since $\frac{1}{7} \times \frac{7}{1} = 1$, the reciprocal of $\frac{1}{7}$ is $\frac{7}{1}$.

Find the quotient of $\frac{4}{5} \div \frac{1}{4}$. Write it in simplest form.

Step 1 Find the reciprocal of the second fraction.

Think: $\frac{1}{4} \times \frac{4}{1} = 1$.

The reciprocal of $\frac{1}{4}$ is $\frac{4}{1}$.

Step 2 Write a multiplication problem using the reciprocal of the second fraction.

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

Step 3 Multiply.

$$\frac{4}{5} \times \frac{4}{1} = \frac{16}{5}$$

Step 4 Simplify.

$$\frac{16}{5} = 3\frac{1}{5}$$

So, $\frac{4}{5} \div \frac{1}{4} = 3\frac{1}{5}$.

Find the quotient. Write it in simplest form.

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

2. $\frac{3}{8} \div \frac{1}{6}$

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

4. $6 \div \frac{2}{3}$

5. $12 \div \frac{3}{4}$

6. $\frac{5}{8} \div \frac{1}{2}$

7. $\frac{7}{10} \div \frac{2}{5}$

8. $\frac{5}{6} \div \frac{1}{6}$
