


Divide Fractions (7-4)

<i>reciprocal</i>	Decode <i>re·cip·ro·cal</i>
Definition <i>Switch the numerator & denominator</i>	Example 

Example 1: Write the reciprocal.

I Do	We Do	You Do
$\times 2$ $4 \frac{2}{5}$ $4 \frac{5}{2}$ $\frac{22}{5} \rightarrow \boxed{\frac{5}{22}}$	$\frac{12}{7}$ $\boxed{\frac{7}{12}}$	$\frac{3}{7}$ $\boxed{\frac{7}{3}}$

$\frac{1}{12}$ ~~$\frac{12}{1}$~~ $\boxed{12}$

Dividing Fractions	
<p>To divide by a fraction, <u>multiply by the reciprocal.</u></p>	<p><i>keep change flip</i></p> $\frac{2}{5} \div \frac{2}{15}$ $\frac{1}{1} \cdot \frac{15}{2} = \frac{15}{2} = \frac{3}{1}$ $= \boxed{3}$

Example 2: Divide the fractions.

I Do	We Do
<p><i>KCF</i></p> $\frac{6}{7} \div \frac{2}{15}$ $3 \frac{6}{7} \cdot \frac{15}{2} = \frac{45}{7}$ $\boxed{6\frac{3}{7}}$	<p><i>KCF</i></p> $\frac{9}{14} \div \frac{7}{12}$ $7 \frac{9}{14} \cdot \frac{12}{7} = \frac{54}{7}$ $\boxed{7\frac{6}{7}}$

Example 3: Use what you know about fractions to divide.

I Do

Your closet is $\frac{12}{13}$ yards long. If you want to divide it into 6 sections, how long will each section be?



$$\frac{12}{13} \text{ yards}$$

$$\frac{12}{13} \div \frac{6}{1}$$

$$2 \frac{\cancel{12}}{13} \cdot \frac{1}{\cancel{6} 1} = \frac{2}{13} \text{ yards}$$