

# Dividing Fractions by Fractions

You can divide a fraction by a fraction by multiplying by its reciprocal instead. Let's try it! Solve  $\frac{1}{3} \div \frac{3}{5}$ .

First, find the reciprocal of the divisor. You can do this by switching the numerator and denominator.

$$\frac{3}{5} \rightarrow \frac{5}{3}$$

Next, change the division problem into a multiplication problem. Multiply by the reciprocal that you found above. Make sure your answer is in simplest form.

$$\frac{1}{3} \div \frac{3}{5} = \frac{1}{3} \times \frac{5}{3} = \frac{5}{9}$$



Try it yourself! Divide. Show your work and write your final answer in simplest form.

$\frac{2}{5} \div \frac{3}{4} =$	$\frac{2}{7} \div \frac{1}{2} =$
$\frac{1}{6} \div \frac{3}{8} =$	$\frac{1}{12} \div \frac{4}{9} =$
$\frac{4}{11} \div \frac{5}{7} =$	$\frac{5}{8} \div \frac{7}{10} =$
$\frac{5}{9} \div \frac{7}{12} =$	$\frac{9}{14} \div \frac{5}{6} =$
$\frac{11}{20} \div \frac{4}{5} =$	$\frac{2}{3} \div \frac{13}{16} =$