

Dividing Fractions

Division of fractions involves using the reciprocal (flipped form) of the second fraction. The reciprocal of a number is such that the product of a number and its reciprocal is 1. To get the reciprocal, simply interchange (flip) the numerator and the denominator. $\frac{1}{3}$

becomes $\frac{3}{1}$
, $\frac{4}{5}$
becomes $\frac{5}{4}$
, and so on.

After the second fraction has been flipped, the division problem turns into a multiplication problem, and the numerators and denominators are multiplied straight across.

Example 1

Now, let's work through the example below. The questions below will guide you through the process.

Divide and simplify $\frac{1}{2} \div \frac{2}{3}$

What will be the reciprocal of $\frac{2}{3}$

?

$$\frac{3}{1}$$

$$\frac{3}{2}$$

The correct answer is: $\frac{3}{2}$

What operation needs done next?

Division

Multiplication

The correct answer is: Multiplication

Multiply $\frac{1}{2} \times \frac{3}{2}$

$$\frac{4}{5}$$

$$\frac{3}{4}$$

$$\frac{5}{6}$$

$$\frac{4}{6}$$

The correct answer is: $\frac{3}{4}$

Can $\frac{3}{4}$

be simplified?

Yes

No

The correct answer is: No

$\frac{3}{4}$

cannot be simplified further.

Practice

Divide and simplify $\frac{2}{5} \div \frac{3}{4} = ?$

$$\frac{8}{15}$$

$$\frac{2}{4}$$

$$\frac{6}{8}$$

$$\frac{3}{4}$$

Select the correct answer.