

Fraction Division

Shown below is a different way to find $\frac{3}{4} \div \frac{1}{2}$.

Find the least common denominator, 4, and rewrite each fraction as an equivalent fraction.

\[ \frac{3}{4} \div \frac{2}{4} \]

Place the numerator of the dividend in the numerator of the quotient. Place the numerator of the divisor in the denominator of the quotient.

\[ \frac{3}{4} \div \frac{2}{4} = \frac{3}{2} \]

Simplify.

\[ \frac{3}{2} = 1 \frac{1}{2} \]

Use this method to find each quotient. Show your work.

1. \[ \frac{4}{5} \div \frac{5}{8} = \]

2. \[ \frac{7}{12} \div \frac{8}{12} = \]

3. \[ \frac{2}{3} \div \frac{3}{4} = \]

4. \[ \frac{3}{7} \div \frac{1}{3} = \]

5. \[ \frac{4}{5} \div \frac{2}{6} = \]

6. \[ \frac{2}{3} \div \frac{3}{5} = \]

7. Which method is easier to use when you divide fractions with like denominators? Explain.
### Fraction Division

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<table>
<thead>
<tr>
<th>Find the least common denominator, 4, and rewrite each fraction as an equivalent fraction.</th>
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<th>Simplify.</th>
</tr>
</thead>
<tbody>
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<td>$\frac{3}{4} \div \frac{2}{4}$</td>
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Use this method to find each quotient. Show your work.

1. $\frac{4}{5} \div \frac{5}{8} = \frac{32}{40} \div \frac{25}{40} = \frac{32}{25} = 1 \frac{7}{25}$

2. $\frac{7}{12} \div \frac{8}{12} = \frac{7}{8}$

3. $\frac{2}{3} \div \frac{3}{4} = \frac{8}{12} \div \frac{9}{12} = \frac{8}{9}$

4. $\frac{3}{7} \div \frac{1}{3} = \frac{9}{21} \div \frac{7}{21} = \frac{9}{7} = 1 \frac{2}{7}$

5. $\frac{4}{5} \div \frac{2}{6} = \frac{24}{30} \div \frac{10}{30} = \frac{24}{10} = 2 \frac{2}{5}$

6. $\frac{2}{3} \div \frac{3}{5} = \frac{10}{15} \div \frac{9}{15} = \frac{10}{9} = 1 \frac{1}{9}$

7. Which method is easier to use when you divide fractions with like denominators? Explain.

**Sample answer:** The method above is easier because you don’t need to multiply.