

Multiplying Fractions

<p>Step One - Use cancellation if one of the two numerators and one of the two denominators share a common factor.</p> <p style="text-align: center;">Multiply $\frac{4}{9} \times \frac{6}{10}$</p> <div style="display: flex; align-items: center; justify-content: center;"> $\frac{4}{9} \times \frac{6}{10}$ <div style="margin-left: 20px;"> <p>3 is the greatest common factor of 6 and 9.</p> </div> </div> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;"> $\frac{4}{3 \times 3} \times \frac{2 \times 3}{10}$ <div style="margin-left: 20px;"> <p>Cross out the common factor and the original numbers (6 and 9). It is the same as reducing 6/9 to 2/3.</p> </div> </div> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;"> $\frac{4}{3 \times \cancel{3}} \times \frac{2 \times \cancel{3}}{10}$ <div style="margin-left: 20px;"> <p>2 is the greatest common factor of 4 and 10.</p> </div> </div> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;"> $\frac{2 \times \cancel{2}}{3 \times \cancel{3}} \times \frac{\cancel{2} \times 1}{\cancel{10} \times 5}$ </div>	<p>Step Two - Multiply the numerators together to get your numerator. Then multiply the denominators together to get your denominator.</p> <div style="text-align: center; margin: 20px 0;"> </div> <p>If your answer can still be reduced further you should. If you can reduce after you have used cancellation, it means you could have canceled further before you multiplied.</p>
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Directions: Multiply each of the following. Use cancellation when possible. Show all of your work including cancellation. All answers must be in simplest form.

$\frac{1}{7} \times \frac{2}{3} =$

$\frac{6}{8} \times \frac{4}{16} =$

$\frac{7}{9} \times \frac{8}{9} =$

$\frac{1}{5} \times \frac{5}{6} =$

$\frac{1}{2} \times \frac{4}{9} =$

$\frac{2}{9} \times \frac{3}{11} =$

$\frac{3}{5} \times \frac{5}{6} =$

$\frac{11}{16} \times \frac{8}{11} =$

$\frac{3}{7} \times \frac{2}{5} =$

$\frac{4}{6} \times \frac{12}{18} =$

$\frac{3}{7} \times \frac{3}{4} =$

$\frac{4}{9} \times \frac{3}{8} =$

$\frac{6}{7} \times \frac{1}{4} =$

$\frac{1}{6} \times \frac{2}{5} =$

$\frac{3}{7} \times \frac{3}{4} =$

$\frac{7}{8} \times \frac{1}{4} =$

$$\frac{6}{15} \times \frac{3}{4} =$$

$$\frac{2}{9} \times \frac{1}{8} =$$

$$\frac{1}{4} \times \frac{3}{4} =$$

$$\frac{5}{6} \times \frac{1}{6} =$$

$$\frac{1}{2} \times \frac{4}{7} =$$

$$\frac{3}{7} \times \frac{1}{5} =$$

$$\frac{14}{15} \times \frac{5}{7} =$$

$$\frac{32}{33} \times \frac{11}{16} =$$

$$\frac{8}{15} \times \frac{5}{8} =$$

$$\frac{5}{21} \times \frac{14}{15} =$$

$$\frac{1}{12} \times \frac{4}{5} =$$

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

$$\frac{10}{17} \times \frac{1}{10} =$$

$$\frac{2}{9} \times \frac{1}{5} =$$

$$\frac{9}{10} \times \frac{3}{4} =$$

$$\frac{10}{19} \times \frac{9}{10} =$$

$$\frac{1}{5} \times \frac{9}{10} =$$

$$\frac{56}{72} \times \frac{36}{42} =$$

$$\frac{24}{25} \times \frac{20}{36} =$$

$$\frac{63}{70} \times \frac{6}{8} =$$

$$\frac{9}{27} \times \frac{1}{4} =$$

$$\frac{6}{7} \times \frac{7}{12} =$$

$$\frac{3}{4} \times \frac{2}{3} =$$

$$\frac{26}{27} \times \frac{9}{13} =$$

$$\frac{4}{7} \times \frac{7}{10} =$$

$$\frac{8}{9} \times \frac{4}{5} =$$

$$\frac{1}{7} \times \frac{4}{11} =$$

$$\frac{9}{11} \times \frac{6}{7} =$$

$$\frac{5}{12} \times \frac{2}{3} =$$

$$\frac{36}{42} \times \frac{21}{45} =$$

$$\frac{3}{4} \times \frac{22}{30} =$$

$$\frac{1}{6} \times \frac{11}{12} =$$