

# Using an Algorithm to Multiply Fractions



## A Fraction Multiplication Algorithm

To multiply two fractions, multiply the numerators and multiply the denominators.

For example:  $\frac{2}{3} * \frac{3}{8} = \frac{(2 * 3)}{(3 * 8)} = \frac{6}{24}$

For Problems 1–6, use the algorithm to multiply the fractions.

①  $\frac{1}{3} * \frac{1}{2} =$  \_\_\_\_\_

②  $\frac{2}{4} * \frac{2}{3} =$  \_\_\_\_\_

③  $\frac{4}{5} * \frac{2}{5} =$  \_\_\_\_\_

④  $\frac{2}{10} * \frac{2}{3} =$  \_\_\_\_\_

⑤  $\frac{2}{8} * \frac{5}{6} =$  \_\_\_\_\_

⑥  $\frac{5}{12} * \frac{2}{7} =$  \_\_\_\_\_

⑦ If you multiply  $\frac{2}{3} * \frac{6}{10}$ , will the product be more than  $\frac{2}{3}$  or less than  $\frac{2}{3}$ ?  
How do you know?

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⑧ If you multiply  $\frac{2}{3} * \frac{6}{10}$ , will the product be more than  $\frac{6}{10}$  or less than  $\frac{6}{10}$ ?  
How do you know?

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In Problems 9–12, write true or false. Do not multiply.

⑨  $\frac{3}{4} * \frac{7}{10}$  is less than  $\frac{3}{4}$ . \_\_\_\_\_

⑩  $\frac{7}{9} * \frac{11}{12}$  is greater than  $\frac{11}{12}$ . \_\_\_\_\_

⑪  $\frac{4}{5} * \frac{2}{8}$  is greater than  $\frac{2}{8}$  but less than  $\frac{4}{5}$ . \_\_\_\_\_

⑫  $\frac{6}{7} * \frac{1}{4}$  is less than  $\frac{6}{7}$  and less than  $\frac{1}{4}$ . \_\_\_\_\_

## Practice

⑬  $\frac{2}{3} + \frac{1}{6} =$  \_\_\_\_\_

⑭  $\frac{3}{4} + \frac{3}{8} =$  \_\_\_\_\_

⑮  $\frac{2}{5} + \frac{1}{4} =$  \_\_\_\_\_