

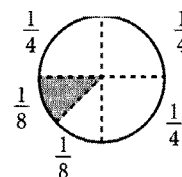
Multiplying Fractions

To multiply a number by a fraction is to find a part of that number.

As shown at the right, $\frac{1}{2}$ of $\frac{1}{4}$ is $\frac{1}{8}$.

Multiplying fractions is the same for both like fractions and unlike fractions.

- Multiply the numerators to find the numerator of the answer.
- Multiply the denominators to find the denominator of the answer.



$\frac{1}{2}$ of $\frac{1}{4}$ is $\frac{1}{8}$.

EXAMPLE 1 $\frac{3}{4} \times \frac{1}{2} =$

STEP 1 Multiply the numerators.

$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

STEP 2 Multiply the denominators.

$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

ANSWER: $\frac{3}{8}$

EXAMPLE 2 $\frac{2}{3} \times \frac{3}{8} =$

STEP 1 Multiply the numerators.

$$\frac{2}{3} \times \frac{3}{8} = \frac{6}{24}$$

STEP 2 Multiply the denominators.

$$\frac{2}{3} \times \frac{3}{8} = \frac{6}{24}$$

STEP 3 Reduce the answer.

$$\frac{6}{24} = \frac{6 \div 6}{24 \div 6} = \frac{1}{4}$$

ANSWER: $\frac{1}{4}$

Multiply. Reduce your answers.

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

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

$$\frac{2}{3} \times \frac{7}{10} =$$

2. $\frac{3}{5} \times \frac{1}{9} =$

$$\frac{3}{8} \times \frac{1}{2} =$$

$$\frac{2}{5} \times \frac{7}{8} =$$

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

$$\frac{3}{7} \times \frac{3}{10} =$$

$$\frac{3}{4} \times \frac{5}{6} =$$

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

$$\frac{2}{4} \times \frac{3}{10} =$$

$$\frac{11}{12} \times \frac{3}{4} =$$

5. $\frac{1}{3} \times \frac{3}{4} \times \frac{2}{5} =$

$$\frac{2}{3} \times \frac{1}{2} \times \frac{3}{4} =$$

$$\frac{3}{5} \times \frac{2}{3} \times \frac{1}{4} =$$