

Lesson 2.2 Multiplying Fractions and Mixed Numbers

Reduce to simplest form if possible. Then, multiply the numerators and multiply the denominators.

$$\frac{3}{8} \times \frac{5}{6} \times \frac{1}{7} = \frac{\cancel{3} \times 5 \times \cancel{1}}{8 \times \cancel{6} \times 7} = \frac{1 \times 5 \times 1}{8 \times 2 \times 7} = \frac{5}{112}$$

Rename the numbers as improper fractions. Reduce to simplest form. Multiply the numerators and denominators. Simplify.

$$3\frac{1}{5} \times 2\frac{2}{3} \times 1\frac{1}{8} = \frac{16 \times \cancel{8} \times \cancel{3}}{\cancel{5} \times \cancel{3} \times \cancel{8}} = \frac{16 \times 1 \times 3}{5 \times 1 \times 1} = \frac{48}{5} = 9\frac{3}{5}$$

Multiply. Write each answer in simplest form.

a**b****c****d****1.**

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

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

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

$\frac{4}{5} \times \frac{1}{8}$

2.

$\frac{3}{5} \times \frac{7}{8}$

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

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

$\frac{3}{10} \times \frac{4}{5}$

3.

$\frac{5}{8} \times \frac{3}{8}$

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

$\frac{5}{6} \times \frac{2}{3}$

$\frac{4}{7} \times \frac{1}{3}$

4.

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

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

$1\frac{1}{9} \times 3\frac{1}{4}$

$2\frac{1}{4} \times 6$

5.

$1\frac{2}{3} \times 3\frac{7}{8}$

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

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

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

6.

$4\frac{1}{8} \times 3\frac{2}{7} \times 7$

$\frac{5}{6} \times 1\frac{1}{3} \times 2$

$\frac{2}{3} \times 1\frac{5}{8} \times 3\frac{1}{4}$

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