Multiplying Mixed Numbers by Mixed Numbers

You can multiply a mixed number by a mixed number. Start by writing both of the mixed numbers as improper fractions to make the multiplication easier. Then, multiply. Let's try it! Solve $2\frac{1}{3} \times 1\frac{1}{4}$.

First, write the mixed numbers as improper fractions.

$$2\frac{1}{3} = \frac{7}{3} \qquad 1\frac{1}{4} = \frac{5}{4}$$

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

Next, multiply the numerators, and then multiply the denominators. Make sure your answer is in simplest form. To simplify an improper fraction, you can rewrite it as a mixed number.

$$\frac{7}{3} \times \frac{5}{4} = \frac{7 \times 5}{3 \times 4} = \frac{35}{12} = 2\frac{11}{12}$$



Try it yourself! Multiply. Show your work and write your final answer in simplest form.

$$2\frac{1}{4} \times 1\frac{2}{5} = \frac{9}{4} \times \frac{7}{5} = \frac{63}{20} = 3\frac{3}{20}$$

$$4\frac{1}{2} \times 1\frac{1}{5} = \frac{9}{2} \times \frac{6}{5} = \frac{54}{10} = 5\frac{2}{5}$$

$$1\frac{1}{5} \times 3\frac{1}{2} = \frac{6}{5} \times \frac{7}{2} = \frac{42}{10} = 4\frac{1}{5}$$

$$1\frac{1}{6} \times 2\frac{2}{3} = \frac{7}{6} \times \frac{8}{3} = \frac{56}{18} = 3\frac{1}{9}$$

$$1\frac{5}{6} \times 2\frac{1}{3} = \frac{11}{6} \times \frac{7}{3} = \frac{77}{18} = 4\frac{5}{18}$$

$$1\frac{3}{7} \times 1\frac{1}{5} = \frac{10}{7} \times \frac{6}{5} = \frac{60}{35} = 1\frac{5}{7}$$

$$1\frac{3}{8} \times 2\frac{1}{4} = \frac{11}{8} \times \frac{9}{4} = \frac{99}{32} = 3\frac{3}{32}$$

$$4\frac{1}{3} \times 1\frac{2}{5} = \frac{13}{3} \times \frac{7}{5} = \frac{91}{15} = 6\frac{1}{15}$$