

Fraction Mult 3: Multiplying Mixed Numbers

When a whole number has a fraction attached, it is called a *mixed number*. Mixed number cannot be multiplied, but they are easily changed to *improper fractions*, which can be multiplied.

Two and three-fourths is how many fourths?

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

The mathematical process to determine the unknown numerator in the improper fraction involves multiplying the whole number times the denominator and adding the numerator such as:

$$2\frac{3}{4} = (2 \times 4) + 3 = 11 \text{ fourths} \quad \text{or} \quad \frac{11}{4}$$

In the same manner,

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

Study how the following problem is solved:

$$2\frac{3}{4} \times 1\frac{1}{2} = \frac{11}{4} \times \frac{3}{2} = \frac{33}{8} = 4\frac{1}{8}$$

Solve the mixed number multiplication problems below and make sure all answers are in simplest form. Use the back of the sheet if extra workspace is needed.

1.

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

2.

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

3.

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

4.

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

5.

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

6.

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

7.

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

8.

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

9.

$$6\frac{1}{8} \times \frac{1}{3}$$

10.

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

11.

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

12.

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

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	