

**Determine Common Denominators**

Find the common factors of  $\frac{1}{4}$  and  $\frac{3}{8}$ .

**STEP 1:** List the multiples of both denominators.

$$4: 4, 8, 12, 16, 20, 24$$

$$8: 8, 16, 24, 32, 40$$

**STEP 2:** Find the Least Common Multiple (LCM) of both numbers.

$$\text{The LCM of 4 and 8 is: 8}$$

**STEP 3:** Set up your fractions to help you determine the common denominators

$$\frac{1}{4} = \frac{?}{8}$$

$$\frac{3}{8} = \frac{?}{8}$$

To find the common denominators:

Divide the denominator of the first fraction by the denominator of the second fraction:  $8 \div 4 = 2$ . Next you multiply 4 by the numerator 1,  $4 \times 1 = 4$ . So the new fraction is  $\frac{4}{8}$ .

$$\frac{1}{4} = \frac{4}{8}$$

$$\frac{3}{8} = \frac{3}{8}$$

Repeat the steps:  $8 \div 8 = 1$ ,  $1 \times 3 = 3$ . So the new fraction is  $\frac{3}{8}$ .

$$\frac{1}{4} = \frac{4}{8}$$

$$\frac{3}{8} = \frac{3}{8}$$

So, the fractions with common denominators are  $\frac{4}{8}$  and  $\frac{3}{8}$ .