


**SKILL**  
**S62**

## Add and Subtract Mixed Numbers with Unlike Denominators

**OBJECTIVE** Add and subtract mixed numbers with unlike denominators.

To add or subtract mixed numbers with unlike denominators, rename the fractions as fractions with a common denominator.

Add:  $3\frac{2}{4} + 1\frac{1}{3}$ .

**STEP 1**

Find a common denominator for  $\frac{2}{4}$  and  $\frac{1}{3}$ .

Make a list of the first five nonzero multiples of 4 and 3.

Multiples of 4: 4, 8, 12, 16, 20

Multiples of 3: 3, 6, 9, 12, 15

A common denominator is \_\_\_\_\_.

**STEP 2**

Rewrite the fractions using the common denominator.

$$3\frac{2}{4} = 3 \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$$

$$1\frac{1}{3} = 1 \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$$

$$\frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}} + \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}} = \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$$

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1cm}} + \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$$

**STEP 3**

Add the fractions.

Add the whole numbers.

Add the sums. Write the answer in simplest form.

### Try This!

Use a common denominator to find the sum or difference.

1.  $2\frac{2}{9} + 3\frac{1}{3} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$

2.  $6\frac{5}{8} - 2\frac{1}{6} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$

3.  $3\frac{3}{5} - 1\frac{1}{2} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$

4.  $5\frac{1}{4} + 1\frac{3}{8} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$

5.  $2\frac{1}{3} + 2\frac{2}{5} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$

6.  $4\frac{5}{6} - 1\frac{1}{2} = \boxed{\phantom{0}} \frac{\boxed{\phantom{0}}}{\boxed{\phantom{0}}}$