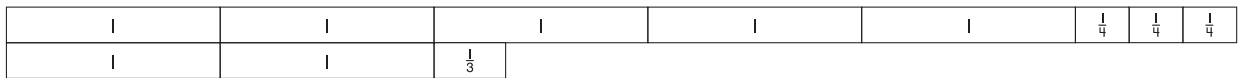


Add and Subtract Mixed Numbers with Unlike Denominators

When you add or subtract mixed numbers, you may need to rename the fractions as fractions with a common denominator.

Find the sum. $5\frac{3}{4} + 2\frac{1}{3}$

Step 1 Model $5\frac{3}{4}$ and $2\frac{1}{3}$.



Step 2 A common denominator for $\frac{3}{4}$ and $\frac{1}{3}$ is 12,

so rename $5\frac{3}{4}$ as $5\frac{9}{12}$ and $2\frac{1}{3}$ as $2\frac{4}{12}$.



Step 3 Add the fractions.

$$\frac{9}{12} + \frac{4}{12} = \frac{13}{12}$$

Step 4 Add the whole numbers.

$$5 + 2 = 7$$

Add the sums.

$$\frac{13}{12} + 7 = 7\frac{13}{12}, \text{ or } 8\frac{1}{12}$$

$$\text{So, } 5\frac{3}{4} + 2\frac{1}{3} = 8\frac{1}{12}.$$

Find the sum or difference.

1 $2\frac{2}{9} + 4\frac{1}{6}$

2 $10\frac{5}{6} + 5\frac{3}{4}$

3 $11\frac{7}{8} - 9\frac{5}{6}$

4 $18\frac{3}{5} - 14\frac{1}{2}$
