

SECTION

4A

Ready to Go On? Skills Intervention**4-3 Adding and Subtracting Mixed Numbers**

In order to add or subtract mixed numbers, you must have a common denominator. If you have like denominators, add the integers, then add the fractions. If you have unlike denominators, you must rewrite the mixed numbers with a common denominator. If the answer is an improper fraction, be sure to rename it as a mixed number and simplify.

Adding Mixed Numbers

Add. Write the answer in simplest form.

$$6\frac{2}{3} + 12\frac{3}{5}$$

$$6\frac{2}{3} + 12\frac{3}{5} = 6\frac{\underline{\quad}10}{\underline{\quad}} + 12\frac{\underline{\quad}9}{\underline{\quad}} \quad \text{What is the common denominator?}$$

$$= \underline{\quad} + \frac{10}{\underline{\quad}} + \frac{9}{\underline{\quad}} \quad \text{Add the whole numbers.}$$

$$= 18 + \frac{\underline{\quad}}{15} \quad \text{Add the fractions.}$$

$$= 18 + \underline{\quad}\frac{\underline{\quad}}{15} \quad \text{Write as a mixed number.}$$

$$= 19\frac{4}{15} \quad \text{Simplify.}$$

When you regroup a fraction you are “borrowing” 1 from the integer. You then rewrite the 1 as a fraction with a common denominator with the other fraction in the problem.

Subtracting Mixed Numbers

Subtract. Write the answer in simplest form.

$$7\frac{1}{4} - 4\frac{3}{10}$$

$$7\frac{1}{4} - 4\frac{3}{10} = 7\frac{\underline{\quad}5}{\underline{\quad}} - 4\frac{\underline{\quad}6}{\underline{\quad}} \quad \text{What is the common denominator?}$$

$$= 6\frac{\underline{\quad}}{\underline{\quad}} - 4\frac{\underline{\quad}}{\underline{\quad}} \quad \text{What is the numerator after regrouping?}$$

$$= \underline{\quad} \quad \text{What is the mixed number after subtracting the integers and subtracting the fractions?}$$