

## LESSON

4-1

## Applying GCF and LCM to Fraction Operations

## Practice and Problem Solving: A/B

Multiply. Use the greatest common factor to write each answer in simplest form.

1.  $\frac{2}{3} \cdot \frac{6}{7}$

\_\_\_\_\_

2.  $\frac{3}{4} \cdot \frac{2}{3}$

\_\_\_\_\_

3.  $\frac{8}{21} \cdot \frac{7}{10}$

\_\_\_\_\_

4.  $24 \cdot \frac{5}{6}$

\_\_\_\_\_

5.  $32 \cdot \frac{3}{8}$

\_\_\_\_\_

6.  $21 \cdot \frac{3}{7}$

\_\_\_\_\_

Add or subtract. Use the least common multiple as the denominator.

7.  $\frac{4}{15} + \frac{5}{6}$

\_\_\_\_\_

8.  $\frac{5}{12} - \frac{3}{20}$

\_\_\_\_\_

9.  $\frac{3}{5} + \frac{3}{20}$

\_\_\_\_\_

10.  $\frac{5}{8} - \frac{5}{24}$

\_\_\_\_\_

11.  $3\frac{5}{12} + 1\frac{3}{8}$

\_\_\_\_\_

12.  $2\frac{9}{10} - 1\frac{7}{18}$

\_\_\_\_\_

Solve.

13. Louis spent 12 hours last week practicing guitar. If  $\frac{1}{4}$  of the time was spent practicing chords, how much time did Louis spend practicing chords?

\_\_\_\_\_

14. Angie and her friends ate  $\frac{3}{4}$  of a pizza. Her brother Joe ate  $\frac{2}{3}$  of what was left. How much of the original pizza did Joe eat?

\_\_\_\_\_

## LESSON

4-1

## Applying GCF and LCM to Fraction Operations

## Reteach

## How to Multiply a Fraction by a Fraction

$$\frac{2}{3} \cdot \frac{3}{8}$$

$$\frac{2}{3} \cdot \frac{3}{8} = \frac{6}{24}$$

$$\frac{2}{3} \cdot \frac{3}{8} = \frac{6}{24}$$

$$\frac{6 \div 6}{24 \div 6} = \frac{1}{4}$$

Multiply numerators.

Multiply denominators.

Divide by the greatest common factor (GCF).

The GCF of 6 and 24 is 6.

## How to Add or Subtract Fractions

$$\frac{5}{6} + \frac{11}{15}$$

$$\frac{25}{30} + \frac{22}{30}$$

$$\frac{25}{30} + \frac{22}{30} = \frac{47}{30}$$

$$= 1 \frac{17}{30}$$

Rewrite over the least common multiple (LCM).

The least common multiple of 6 and 15 is 30.

Add the numerators.

If the sum is an improper fraction, rewrite it as a mixed number.

## Multiply. Use the greatest common factor.

1.  $\frac{3}{4} \cdot \frac{7}{9}$

2.  $\frac{2}{7} \cdot \frac{7}{9}$

3.  $\frac{7}{11} \cdot \frac{22}{28}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4.  $8 \cdot \frac{3}{10}$

5.  $\frac{4}{9} \cdot \frac{3}{4}$

6.  $\frac{3}{7} \cdot \frac{2}{3}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Add or subtract. Use the least common multiple.

7.  $\frac{7}{9} + \frac{5}{12}$

8.  $\frac{21}{24} - \frac{3}{8}$

9.  $\frac{11}{15} + \frac{7}{12}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_