Study Guide: Review

Homework

Vocabulary

Complete the sentences below with vocabulary words from the list above.

1. Two numbers are ___?___ if their product is 1.
2. The ___?___ is the smallest number that is a common multiple of two or more denominators.

5-1 Least Common Multiple (pp. 228–231)

EXAMPLE

■ Find the least common multiple (LCM) of 4, 6, and 8.

4: 4, 8, 12, 16, 20, 24, 28, . . .
6: 6, 12, 18, 24, 30, . . .
8: 8, 16, 24, 32, . . .
LCM: 24

EXERCISES

Find the least common multiple (LCM).

3. 3, 5, and 10
4. 6, 8, and 16
5. 3, 9, and 27
6. 4, 12, and 30
7. 25 and 45
8. 12, 22, and 30

5-2 Adding and Subtracting with Unlike Denominators (pp. 234–237)

EXAMPLE

■ $\frac{7}{9} + \frac{2}{3}$

$\frac{7}{9} + \frac{2}{3}$ *Write equivalent fractions. Add.*

$\frac{7}{9} + \frac{6}{9} = \frac{13}{9} = 1\frac{4}{9}$

EXERCISES

Add or subtract. Write each answer in simplest form.

9. $\frac{1}{5} + \frac{5}{8}$
10. $\frac{1}{6} + \frac{7}{12}$
11. $\frac{13}{15} - \frac{4}{5}$
12. $\frac{7}{8} - \frac{2}{3}$

5-3 Adding and Subtracting Mixed Numbers (pp. 238–241)

EXAMPLE

■ Find the difference. Write the answer in simplest form.

$5\frac{5}{8} - 3\frac{1}{6}$

$5\frac{15}{24} - 3\frac{4}{24}$ *Write equivalent fractions.*

$2\frac{11}{24}$ *Subtract.*

EXERCISES

Find each sum or difference. Write the answer in simplest form.

13. $1\frac{3}{10} + 3\frac{2}{5}$
14. $4\frac{5}{9} - 1\frac{1}{2}$
15. Angela had $\frac{7}{10}$ gallon of paint. She used $\frac{1}{5}$ gallon for a project. How much paint did she have left?

5-4 Regrouping to Subtract Mixed Numbers (pp. 244–247)

EXAMPLE

■ Subtract.

$4\frac{7}{10} - 2\frac{9}{10}$

$3\frac{17}{10} - 2\frac{9}{10}$ *Regroup $4\frac{7}{10}$. Subtract.*

$1\frac{8}{10}$

$1\frac{4}{5}$

EXERCISES

Subtract. Write each answer in simplest form.

16. $7\frac{2}{9} - 3\frac{5}{9}$

17. $3\frac{1}{5} - 1\frac{7}{10}$

18. $8\frac{7}{12} - 2\frac{11}{12}$

19. $5\frac{3}{8} - 2\frac{3}{4}$

20. $11\frac{6}{7} - 4\frac{13}{14}$

21. $10 - 8\frac{7}{8}$

22. Georgette needs 8 feet of ribbon to decorate gifts. She has $3\frac{1}{4}$ feet of ribbon. How many more feet of ribbon does Georgette need?

5-5 Solving Fraction Equations: Addition and Subtraction (pp. 248–251)

EXAMPLE

■ Solve $n + 2\frac{5}{7} = 8$.

$n + 2\frac{5}{7} - 2\frac{5}{7} = 8 - 2\frac{5}{7}$

$n = 8 - 2\frac{5}{7}$

$n = 7\frac{7}{7} - 2\frac{5}{7}$

$n = 5\frac{2}{7}$

EXERCISES

Solve each equation. Write the solution in simplest form.

23. $x - 12\frac{3}{4} = 17\frac{2}{5}$

24. $t + 6\frac{11}{12} = 21\frac{5}{6}$

25. $3\frac{2}{3} = m - 1\frac{3}{4}$

26. $5\frac{2}{3} = p + 2\frac{2}{9}$

27. $y - 1\frac{2}{3} = 3\frac{4}{5}$

28. $4\frac{2}{5} + j = 7\frac{7}{10}$

* 29. Jon poured $1\frac{1}{2}$ oz of lemon juice onto a salad. He has $5\frac{1}{2}$ oz lemon juice left in the bottle. How many ounces of lemon juice were in the bottle before Jon poured some on the salad?

* must write an equation and solve! →

Study Guide: Review

Chapter 5 Study Guide: Review

1. reciprocals 2. least common denominator 3. 30 4. 48 5. 27 6. 60 7. 225 8. 660 9. $\frac{33}{40}$ 10. $\frac{3}{4}$ 11. $\frac{1}{15}$ 12. $\frac{5}{24}$ 13. $4\frac{7}{10}$ 14. $3\frac{1}{18}$ 15. $\frac{11}{30}$ 16. $3\frac{2}{3}$ 17. $1\frac{1}{2}$ 18. $5\frac{2}{3}$ 19. $2\frac{5}{8}$ 20. $6\frac{13}{14}$ 21. $1\frac{1}{8}$ 22. $4\frac{3}{4}$ feet 23. $30\frac{3}{20}$ 24. $14\frac{11}{12}$ 25. $5\frac{5}{12}$ 26. $9\frac{4}{9}$ 27. $5\frac{7}{15}$ 28. $3\frac{3}{10}$ 29. 7 oz