6 Chapter Review

Key Words

Unscramble the letters for each puzzle. Use the clues to help you solve the puzzles.

- **1.** T E W L S O E M R T S when the numerator and denominator of a fraction have no common factors other than 1 (two words)
- **2.** L I B I I S V E D when a number divides into another number, with no remainder
- **3.** M O O M N C T R A C O F a number that two or more numbers are divisible by (two words)

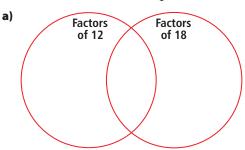
6.1 Divisibility, pages 198-209

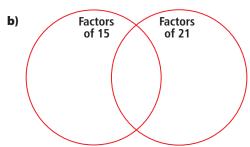
4. Copy and complete the table. If the number in the left column is divisible by the number in the top row, put a ✓. If it is not divisible, put an X.

| | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 10 |
|------|---|---|---|---|---|---|---|----|
| 630 | | | | | | | | |
| 5184 | | | | | | | | |
| 2035 | | | | | | | | |
| 810 | | | | | | | | |

- **5. a)** How do you know that 210 is divisible by 2, 5, and 10?
 - **b)** How do you know that 1232 is divisible by 4 and 8?
 - c) How do you know that 333 is divisible by 3 and 9 but not by 6?

- **6.** Use a pattern to show why numbers cannot be divided by 0.
- **7.** Copy and complete the following Venn diagrams to determine the greatest common factor of each pair of numbers.





- **8.** Write each fraction in lowest terms.
 - **a)** $\frac{4}{8}$
- **b)** $\frac{6}{10}$
- c) $\frac{20}{30}$
- d) $\frac{15}{24}$
- e) $\frac{12}{16}$
- f) $\frac{10}{24}$
- 9. A drama teacher is putting his students into groups. There must be the same number of females in each group and the same number of males in each group.

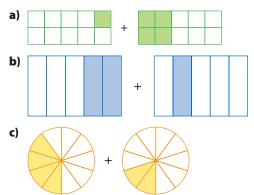
 There are 12 males and 18 females. Each student must be in a group. What is the greatest number of groups there can be?

6.2 Add Fractions With Like Denominators, pages 210–216

10. Write each addition statement shown by the fraction strips. Then add. Write each answer in lowest terms.

| a) | | | + | | | |
|----|--|---|-----|--|---|---|
| b) | | |] + | | | |
| c) | | 1 | 1 . | | _ | _ |

11. Write each addition statement shown. Add. Write each answer in lowest terms.



12. Add. Write each answer in lowest terms.

a)
$$\frac{2}{3} + \frac{1}{3}$$

b)
$$\frac{3}{8} + \frac{1}{8}$$

c)
$$\frac{1}{12} + \frac{5}{12}$$

d)
$$\frac{3}{5} + \frac{1}{5}$$

e)
$$\frac{1}{14} + \frac{1}{14}$$

f)
$$\frac{2}{7} + \frac{4}{7}$$

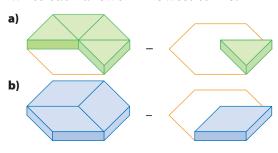
13. Two students volunteered to clean the desks in one of the classrooms.



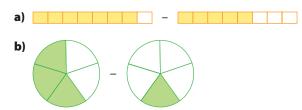
Did the students get the job done? Explain.

6.3 Subtract Fractions With Like Denominators, pages 217–221

14. Write each subtraction statement shown by the pattern blocks. Then subtract. Write each answer in lowest terms.



15. Write a subtraction statement for each diagram. Then subtract. Write each answer in lowest terms.



16. Subtract. Write each answer in lowest terms.

a)
$$\frac{2}{3} - \frac{1}{3}$$

b)
$$\frac{7}{8} - \frac{1}{8}$$

c)
$$\frac{5}{6} - \frac{5}{6}$$

d)
$$\frac{11}{15} - \frac{2}{15}$$

e)
$$\frac{7}{8} - \frac{3}{8}$$

f)
$$\frac{9}{10} - \frac{3}{10}$$

17. Jack is making vegetable dip for a party. He needs $\frac{2}{5}$ of a jar of mayonnaise to make

it. The jar is $\frac{4}{5}$ full. He drops it and only

 $\frac{1}{5}$ of a jar is left.

- a) Does he have enough left in the jar to make the dip? If not, how much more does he need?
- **b)** How much of the jar spilled out?