# 1.5

## Practice A

Use a Venn diagram to find the greatest common factor of the numbers.

Find the GCF of the numbers using lists of factors.

Find the GCF of the numbers using prime factorizations.

- **16.** A high school swim team has 12 new female swimmers and 30 returning female swimmers. Each practice team must have the same number of new and returning female swimmers.
  - **a.** What is the greatest number of practice teams the coach can make using every swimmer?
  - **b.** How many new and returning female students will be on each practice team?

Find the GCF of the numbers.

20. Write a set of three numbers that have a GCF of 13.

Tell whether the statement is always, sometimes, or never true.

- 21. The GCF of two numbers is a composite number.
- **22.** The GCF of two numbers is equal to the lesser of the numbers.
- 23. You have three numbers.
  - **a.** Two of the numbers are 24 and 42. What is the GCF of these two numbers?
  - **b.** The third number is greater than 42 and does not change the GCF. What is one possibility for the third number?

# 1.6

## Practice A

Use a Venn diagram to find the least common multiple of the numbers.

Find the LCM of the numbers using lists of multiples.

Find the LCM of the numbers using prime factorizations.

**16.** Describe and correct the error in finding the LCM.

$$\begin{array}{c} 10 = 2 \bullet 5 \\ 15 = 3 \bullet 5 \\ \text{LCM} = 5 \end{array}$$

- **17.** You have piano lessons every 7 days and tuba lessons every 3 days. Today you have both lessons.
  - a. In how many days will you have both lessons on the same day again?
  - **b.** Not counting today or the day when you have the same lesson again, how many piano lessons will you have in between? How many tuba lessons will you have in between?

Find the LCM of the numbers.

21. The snooze button on your alarm clock activates the alarm every 5 minutes. The snooze button on your cell phone activates the alarm every 7 minutes. Both alarms activate at 7:00 A.M. You hit each snooze button as each alarm activates. At what time are both alarms activated again?

Name	

# Chapter 1

## Quiz

### For use after Section 1.6

List the factor pairs of the number.

**1.** 26

**2.** 32

Write the prime factorization of the number.

**3.** 40

**4.** 52

Find the GCF of the numbers using lists of factors.

**5.** 12, 32

**6.** 27, 39

Find the GCF of the numbers using prime factorizations.

**7.** 24, 64

**8.** 54, 84

Find the LCM of the numbers using lists of multiples.

**9.** 6, 15

**10.** 8, 18

Find the LCM of the numbers using prime factorizations.

**11.** 18, 24

**12.** 12, 21

Add or subtract. Write the answer in simplest form.

**13.**  $\frac{2}{7} + \frac{2}{3}$ 

- **14.**  $4\frac{5}{6} 2\frac{7}{8}$
- **15.** A football coach divides 42 players into equal groups for a warm up drill. Each group should have at least 5 players but no more than 8 players. What are the possible group sizes?
- **16.** You are filling identical fruit bowls using 36 apples and 48 oranges. What is the greatest number of bowls that you can fill using all of the fruit?
- **17.** You have a Spanish club meeting every fourth day and a math club meeting every tenth day. Today you have both meetings. In how many days will you have both meetings on the same day again?
- **18.** Commemorative coins come in packs of 15, while coin holders come in packs of 25. What are the least numbers of packs you should buy in order to have the same numbers of coins and coin holders?

#### **Answers**

- 1.
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9.
- 10. \_\_\_\_\_
- 11. \_\_\_\_\_
- 12. \_\_\_\_
- 13. \_\_\_\_\_
- 14. \_\_\_\_\_
- 15. \_\_\_\_\_
- 16. \_\_\_\_\_
- 17. \_\_\_\_\_
- 18. \_\_\_\_\_