

Chapter 1 Positive Numbers and the Number Line

Dear Family,

In this chapter, your student will learn about positive numbers. Some of the skills your student will practice are:

- *representing whole numbers, fractions, and decimals on a number line*
- *interpreting and writing inequalities*
- *writing a number as a product of its prime factors*
- *finding common factors and common multiples of two whole numbers, including the greatest common factor and the least common multiple*

Activity

Finding common factors and multiples of numbers prepares students for working with algebraic expressions in future mathematics classes. You can practice this skill with your student with the following activity.

- Choose two numbers that share at least one factor other than 1, such as 42 and 63.
- Have your student write all the factors of one number while you write all the factors of the other.
Factors of 42: 1, 2, 3, 6, 7, 14, 21, 42
Factors of 63: 1, 3, 7, 9, 21, 63
Compare your lists and circle all of the factors that the numbers have in common. Which is the greatest?
- Now write several multiples of each of the numbers.
Multiples of 42: 42, 84, 126, 168, 210, 252, 294, ...
Multiples of 63: 63, 126, 189, 252, 315, ...
Compare your lists and circle any multiples that the numbers have in common. How many common multiples can two numbers have? Which is the least?

Vocabulary to Practice

A **number line** displays numbers at marked intervals. **Positive numbers** are to the right of 0.

A prime number has exactly two factors, 1 and itself. Any other whole number is a **composite number**. The factors of 20 are 1, 2, 4, 5, 10, and 20. The **prime factors** of 20 are 2 and 5.

The **common factors** of 12 and 16 are 2 and 4. The **greatest common factor** is 4.

Any two whole numbers have **common multiples**. The **least common multiple** of 12 and 16 is 48.



Online Resources

For additional Parent Resources my.hrw.com