Math in Focus
Singapore Math
by Marshall Cavendish

Family Letters and Activities

Chapter 4 Algebraic Equations and Inequalities

Dear Family,

In this chapter, your student will learn how to solve algebraic equations and inequalities. Some of the skills your student will practice are:

- *identifying equivalent equations*
- *solving algebraic equations and inequalities*
- *solving real-world problems using equations and inequalities*

Activity

Translating words into equations, and vice versa, is an important step in solving word problems. You can help your student understand this skill with the following activity.

- Write an algebraic equation, such as $\frac{1}{4}x + 40 = 60$. With your student, create at least two different word problems that both correspond to the equation, such as:

  1. The cost of running a button-making booth at a school fair is $40 for renting the booth, plus $0.25 per button for the materials. If the total cost is $60, how many buttons were made?

  2. A robot can move only in a straight line. It starts when it is 40 feet away from its base and stops when it is 60 feet away. It travels at a rate of $\frac{1}{4}$ feet per second. How long did it travel?

- Solve the problems together. Discuss what each number or variable represents in each situation, how the equation represents each situation, and how units are needed for each solution.

Vocabulary to Practice

$2x + 1 = 5$ and $2x = 4$ are **equivalent equations** because they have the same solution, $x = 2$.

To **solve** an equation, perform the same operation on both sides of the equation to get an equivalent equation.

The **solution set** of an inequality is all the numbers that make the inequality true.

Online Resources

For additional Parent Resources *my.hrw.com*