Math in Focus Singapore Math by Marshall Cavendish

Family Letters and Activities

Chapter 3 Algebraic Linear Equations

Dear Family,

In this chapter, your student will solve linear equations in one or two variables. Some of the skills your student will practice are:

- *solving linear equations in one variable and solving real-world problems involving linear equations*
- *identifying linear equations with no solutions or with infinitely many solutions*
- *representing a relationship between two variables using a table of values or a linear equation*
- *solving a multi-variable equation for one of its variables*

Activity

Linear equations are used in many different math, science, and social science classes. You can help your student understand how to model a relationship with a linear equation with this activity.

- Suppose a student has $22, and can earn $5.25 per hour. You will model the relationship between the hours worked and the student's total amount of money.
- Create a table of values that models the relationship, using appropriate values and variables:

Number of hours worked (*h*)	0	1	2	3
Total amount of money (*m*)	$22	$27.25	$33.50	

- Write an equation for the total amount of money in terms of the number of hours worked: $m = 5.25h + 22$.

Choose a value for m, substitute it in the equation, and solve the equation for h. For example, to find out how many hours of work it will take to save $85.00, substitute 85 for m and solve the equation for h.

Vocabulary to Practice

A linear equation with one variable may have one solution, no solution, or infinitely many solutions.

An equation with no solution, such as $8x + 3 = 8x - 1$, is called an **inconsistent** equation.

An equation with infinitely many solutions, such as $3x + 4x = 7x$, is called an **identity**.

Online Resources

For additional Parent Resources *my.hrw.com*