

# Family Letters and Activities

### Chapter 8 Equations and Inequalities

### Dear Family,

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

- solving equations with one variable
- writing linear equations and graphing

## Activity

You can help your student understand how different forms of an equation are related.

• With your student, choose a rate at which your student might be able earn or save money, such as \$3 per week. Use the rate to fill in a table similar to this one:

Week	1	2	3	4	5
Amount saved	?	?	?	?	?

- On a piece of graph paper, make a graph like the one shown.
  Graph the points from your table.
- Now choose a financial goal, such as saving \$15 to donate to a food bank. Write an equation for the number of weeks needed to reach the goal: 3x = 15. Help your student solve the equation.



• Look at your graph. Is there a point that represents the number of weeks needed to save the amount you chose? Discuss how the graph and equation are related.

#### Vocabulary to Practice

An **equation** tells you that two expressions or quantities are equal.

The **solution** of an equation is the value of the variable that makes the equation true. For example, the solution of the equation x + 7 = 11 is 4.

A **linear equation,** such as y = x + 1, is an equation with two variables, the **independent variable** (x) and the **dependent variable** (y).

An **inequality** tells you that two expressions or quantities are not equal. The symbols >, <,  $\geq$ , and  $\leq$  are all inequality symbols.

