# **UNIT 2 • REASONING WITH LINEAR EQUATIONS AND INEQUALITIES** Lesson 1: Creating Linear Equations and Inequalities in One Variable

#### Instruction

## Problem-Based Task 2.1.2: Free Checking Accounts

### **Coaching Sample Responses**

a. What is the minimum amount of money you want to have to open your checking account?

\$225

Students at first might be inclined to write \$200 because this is the minimum amount needed for a free checking account, but the problem also states that there needs to be \$25 left in the savings account.

b. How much are you depositing each week?

\$15/week

This is given in the problem.

c. What inequality can be written to model the scenario?

 $60+15x\geq 225$ 

You start with \$60 and deposit \$15 each week and need at least \$225.

d. What is the solution to the inequality?

 $60 + 15x \ge 225$  $15x \ge 165$  $x \ge 11$ 

e. What does the solution of the inequality represent in terms of the context of the problem? Any time after 11 weeks, there will be enough money to open the checking account.

#### **Recommended Closure Activity**

Select one or more of the essential questions for a class discussion or as a journal entry prompt.