

## Family Letter

Dear Student and Family Members,

Our next chapter is about solving equations. We will be reviewing the two methods of solving equations that we learned in previous chapters: guess-check-and-improve and backtracking (reasoning backward). Then we will learn to use a more efficient method: doing the same thing to both sides of the equation, which is probably the method you are most familiar with. Here is an example of the kind of problem we will explore.

**Problem:** Madeline and Neil collect autographs of basketball players. Madeline has 9 more autographs than Neil. They have 31 autographs in all. How many does each person have?

Let  $a$  represent how many autographs Neil has. Then write an equation that shows that Madeline and Neil have a combined total of 31 autographs:  $a + a + 9 = 31$  or  $2a + 9 = 31$ .

**Vocabulary** Along the way, we'll be learning about these two new vocabulary terms:

**conjecture**

**model**

### What can you do at home?

See if you and your student can find examples of equations in your work or in places you visit. Can you solve any of them?