

# **Problem-solving Strategies for Word Problems: 4-Step Method**

### **Step 1: Understand the Problem**

To understand a word problem, you need to answer these questions.

- What information is given?
- What are you asked to find?
- Does the question need an exact or approximate answer?

Use one or more of the following strategies to help you answer these questions.

- Interpret visuals, such as pictures, charts, tables and graphs.
- Identify keywords.
- Identify important and unimportant information.

## Step 2: Think of a Plan

Keywords and important information will help you develop a plan for solving problems. Some strategies you may use to solve problems include the following.

- Look for patterns.
- Draw a picture or use manipulatives.
- Make it simpler.
- Guess and check.
- · Work backwards.
- Organize information.

# **Step 3: Carry Out the Plan**

Solve the problem using a pencil and paper, manipulatives, a calculator, a computer or another strategy you identified in your plan. State the solution to the problem in a conclusion sentence.

#### Step 4: Look Back

Use some or all of the following strategies to check your solution for reasonableness and accuracy.

- Use the information and/or numbers in the word problem to estimate a solution.
  Then compare your answer to this estimate to help you determine the reasonableness of your solution.
- Check that decimals are placed correctly.
- Use a calculator.
- Compare your answer with classmates and discuss.
- Use the opposite operation.

Look back and rethink the problem-solving strategies you used to solve the problem. Think about and discuss answers to the following questions to help solve similar problems in the future.

- Is there another strategy that may have worked just as well or better to solve the problem?
- What other problems could I use these strategies for in the future?