

- 5** In 2001, a hiker walked all three major U.S. hiking trails. He was the first person to do this in one calendar year. He averaged 158,400 feet per day. If he walked 7,371 miles in all, about how many months did it take him?

**FIND OUT**

- **What is the problem about?** Encourage students to restate the problem in their own words.
- **What do you have to find out to solve the problem?** *About how many months it took the hiker to walk the three major U.S. hiking trails*
- **What does the problem tell you about the distance that he hiked?** *He walked about 158,400 feet a day, and he went a total of 7,371 miles.*

CHOOSE STRATEGIES

You can *Make It Simpler* to help you solve the problem. To make the problem simpler, start with finding out how many miles he went in one day.

SOLVE IT

1. **What do you know about how far the hiker went in one day?** *He went about 158,400 feet. How can you find out how many miles that is? Divide by 5,280. How many miles did he go in one day? 30 miles*
2. **How can you find out how many months it took him?** *First find out how many days he hiked in all. How can you find out the number of days he hiked? Divide 7,371 by 30. How many days did he hike? 245.7 days*
3. **Now, how can you find the number of months that he hiked?** *Divide the number of days by 30.*
4. **About how many months did it take him?**
Solution: About 8 months (if you divide the number of days by 30)

LOOK BACK

Students should read the problem again and check their work. Encourage them to ask themselves, **Did I answer the question that was asked? Does my answer make sense?**

Some teachers like to give students one or more of the Writing Questions (page xx), asking them to explain how they solved the problem.

EXTENSION PROBLEM

Over the entire trip, the hiker's total change in elevation was 1,500,000 feet. If he hiked 10 hours a day, about what was his average change in elevation per hour?

Solution: *610.5 feet per hour*

TALK ABOUT IT

Have students talk with a partner or with a group about how they solved the Extension Problem. Students can share their different ways of thinking. Ask questions like, **How did you make this problem simpler? What was your first step?**

WRITE YOUR OWN PROBLEM

Have students write similar problems of their own. Students can then exchange the problems and solve them.

PRACTICE

Similar Practice Problems: 45, 46, 47

When you give students a Practice Problem, ask questions such as, **Have you solved a problem like this before? What strategies helped you solve it?**