



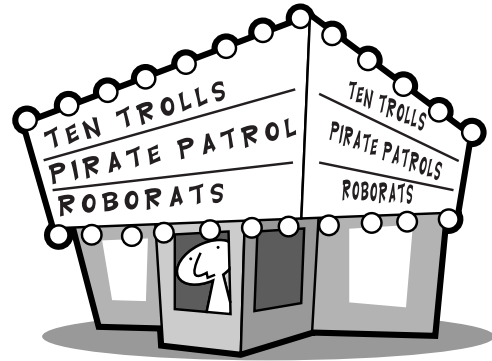
A	B
3	1
7	5

Work Backwards Use or Make a Table

29

Movie	Starting Times
Ten Trolls	12:00 noon 2:30 P.M. 5:00 P.M.
Pirate Patrol	1:00 P.M. 3:30 P.M. 6:00 P.M.
RoboRats	2:00 P.M. 4:30 P.M. 7:00 P.M.

Ramal and his brother took a bus to the Movie Mall. They saw a movie that lasted 2 hours. It took them 30 minutes to get home after the movie. They got home at 6:00 P.M. Which movie did they see, and when did it start?



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?** *Which movie Ramal and his brother saw, and the time it started*
- **What does the problem tell you about the movie the boys saw?** *It lasted for 2 hours.*
- **How long did it take them to get home?** *30 minutes*
- **When did they get home?** *6:00 P.M.*

CHOOSE STRATEGIES

You can use *Work Backwards* and *Use or Make a Table* to help you solve this kind of problem.

TEACHING TIP

Tell students they will be working backwards in two ways as they solve this problem. They will begin with information found at the end of the problem and work backwards through the problem. They will also work backwards in time. Have students practice going backwards on the clock. If it is now 2:00, what time would it be 2 hours before 2:00? Some students may want to sketch a clock face for this work.

SOLVE IT

1. **Begin with the information given at the end of the problem. What time did the boys get home?** *6:00 P.M.*
2. **How long did it take them to get home?** *30 minutes*
3. **Count back 30 minutes from 6:00 P.M. What time did they start for home?** *5:30 P.M.*
4. **Work backwards again. What do you know about the movie they saw?** *It lasted 2 hours.*

Problem 29 : Measurement

5. Count back that amount of time. **What time is that?** 3:30 P.M.
6. **Look at the table of starting times. Does one of the starting times match your time?** Yes.
7. **Which movie did they see, and when did it start?**
Solution: *Pirate Patrol*; 3:30 P.M.

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

Jenny and her sister went to the Movie Mall on Saturday. They saw a movie that was 2 hours long. After the movie, Jenny and her sister spent 30 minutes having a snack. Then, it took them another 60 minutes to get home. They got home at 5:30 P.M. What movie did they see and when did it start?

Solution: *RoboRats* at 2:00 P.M.

TALK ABOUT IT

Have students talk with a partner or small group about how they solved the Extension Problem. Encourage students to share their different ways of thinking. Ask questions like, **What did you have trouble with? What helped you to solve the problem?**

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: 81, 82, 83

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?**