

## **KEY CONCEPT OVERVIEW**

In Lessons 16 through 18, students learn to multiply and divide with units of 0 and 1. While the multiplication and division facts for 0 and 1 tend to be easy for students to recall, they have unique patterns.

You can expect to see homework that asks your child to do the following:

- Solve multiplication and division facts with units of 0 and 1.
- Look for patterns in multiplication and division facts, using the multiplication table.
- Use the **RDW process** to solve two-step word problems involving addition, subtraction, multiplication, and division.

SAMPLE PROBLEM (From Lesson 16)

Matt explains to his little sister what he learned about dividing with zero.

a. What might Matt tell his sister about solving  $0 \div 9$ ? Explain your answer.

If 0 is divided by any number, it is still 0 because the amount you start with is 0 so there is nothing to divide. I can also write a related multiplication fact that is true:  $0 \div 9 = 0$  and  $0 \times 9 = 0$ .

b. What might Matt tell his sister about solving  $8 \div 0$ ? Explain your answer.

If any amount is divided by 0, it doesn't make sense because I cannot divide something into 0 equal groups. I also cannot write a related multiplication fact that is true:  $8 \div 0$  does not equal 8 or 0, because  $8 \times 0$  does not equal 8 and  $0 \times 0$  does not equal 8.

 $Additional \ sample \ problems \ with \ detailed \ answer \ steps \ are \ found \ in \ the \ Eureka \ Math \ Homework \ Helpers \ books. \ Learn \ more \ at \ Great Minds. org.$ 

## HOW YOU CAN HELP AT HOME

- Continue to practice all multiplication and division facts from 0 to 9 from memory. Practice with games or with blank multiplication tables. Use a timer to see how quickly your child can fill in a blank multiplication table.
- Make Fact Towers. Get a box of small paper cups. On the outside of every cup, write a
  multiplication or division fact. On the inside of every cup, write the answer. Stack the cups and
  have your child pull the top cup from the stack and solve the problem written on it. If your child
  answers correctly, place the cup upside down on the table; if not, place the cup on the bottom of
  the stack. Arrange cups with correct answers to form a pyramid. (See images.) Keep going until
  all the cups are part of the pyramid. See how tall your child can make the pyramid!



## **TERMS**

**RDW process:** A three-step process used in solving word problems. RDW stands for Read, Draw, Write: Read the problem for understanding; Draw a model (e.g., a tape diagram) to help make sense of the problem; Write an equation and a statement of the answer.

