EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

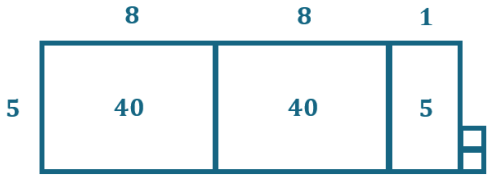
Lessons 14 through 21 focus on division. Students develop an understanding of **remainders**. They use different methods to solve division problems.

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

- Use the RDW process to solve word problems involving remainders.
- Show division by using place value disks, arrays, **area models**, and **long division**.
- Check division answers by using multiplication and addition.

SAMPLE PROBLEM *(From Lesson 21)*

Solve 87 ÷ 5 by using an area model. Use long division and the **distributive property** to record your work.



$(40 \div 5) + (40 \div 5) + (5 \div 5)$

$= 8 + 8 + 1$

$= 17$

Check: $(5 \times 17) + 2 = 87$

$$
\begin{array}{r}
17\ R2 \\
5\overline{)87} \\
-\ 5 \\
\hline
37 \\
-\ 35 \\
\hline
2
\end{array}
$$

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

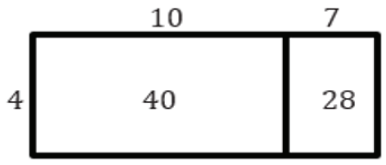
- Provide your child with many opportunities to interpret remainders. For example, give scenarios such as the following: Arielle wants to buy juice boxes for her classmates. The juice boxes come in packages of 6. If there are 19 students in Arielle's class, how many packages of juice boxes will she need to buy? (4) Will there be any juice boxes left? (Yes) How many? (5)
- Play a game of Remainder or No Remainder with your child.
    1. Say a division expression like 11 ÷ 5.
    2. Prompt your child to respond with "Remainder!" or "No remainder!"
    3. Continue with a sequence such as 9 ÷ 3 (No remainder!), 10 ÷ 3 (Remainder!), 25 ÷ 3 (Remainder!), 24 ÷ 3 (No remainder!), and 37 ÷ 5 (Remainder!). See how many problems your child can answer in one minute.

TERMS

Distributive property: A property of multiplication that can be used to create an easier problem, for example, 6 fours = 5 fours + 1 four or $6 \times 4 = (5 \times 4) + (1 \times 4)$.
Long division: A process taken to solve a division problem; also known as the standard algorithm for division.
Quotient: The resulting answer when one number is divided by another. For example, in $28 \div 4 = 7$, the number 7 is the quotient.
Remainder: The number left over when a whole number is divided by a whole number, for example, $25 \div 6 = 4$ with a remainder of 1.
Standard algorithm: A standard step-by-step procedure to solve a particular type of problem. For example, the process of long division is a standard algorithm.

MODELS

Area Model: A model used to help solve multiplication and division problems.



$68 \div 4 = 17$