

# FAMILY MATH

## Remainders, Estimating, and Problem Solving

Dear Family,

Your student is learning to divide with numbers that result in a remainder. Up to this point, students have worked with totals that could be divided evenly. Students learn that if the total is not a multiple of the divisor then there is a remainder. They solve division word problems and use estimation to decide whether their answers are reasonable. Students realize that the remainder, the quotient, or both could be used to help them determine the answer based on the word problem.

**Key Term**  
remainder

$15 \div 7$   
 $(2 \times 7) + 1$   
 Quotient: 2  
 Remainder: 1

$15 = (2 \times 7) + 1$   
 Quotient: 2  
 Remainder: 1

The total is 15. There is a remainder because 15 is not a multiple of the divisor, 7.

$18 \quad 76$   
 $g = 94$   
 $5$   
 $10$   
 $6 \overline{) 94}$   
 $- 60$   
 $34$   
 $- 30$   
 $4$

The fewest number of cartons Miss Wong needs for all the eggs is 16.

Miss Wong has 18 eggs. She gets 76 more eggs from her chickens. She puts the eggs into cartons. Each carton can hold 6 eggs. What is the fewest number of cartons she needs for all the eggs?

To answer the question both the remainder and the quotient need to be considered. To determine the fewest number needed, 1 must be added to the quotient.

## At-Home Activity

### Thinking about Remainders

Look for opportunities with your student where you can divide objects among people. Remind your student to ask whether the total is a multiple of the divisor. Consider using the following sample situations.

- “There are 5 of us having lemonade. There are 16 ice cubes in an ice tray. If each of us gets an equal number of ice cubes will any ice cubes be left over? How do you know?”

Ask your student to divide an odd number of crayons between 2 people. Before they divide, ask them whether they think any crayons will be left over. Have them explain their reasoning.