

## 7

## Family Letter

**Dear Parent or Guardian:**

In our math class, we try to relate things we learn in the classroom to the real world. Ratios, rates, and proportions are all around us. We use ratios to compare numbers. We use rates to compare quantities with different units. And we use proportions to solve ratios and rate problems.

In **Chapter 7, Ratios and Proportions**, your child will learn about ratios, rates, and proportions. Your child will learn how to convert ratios to fractions, convert decimals to percents, solve proportions, and solve problems using the percent proportion. In addition, your child will learn to change customary units and to solve problems by drawing a diagram. In the study of this chapter, your child will complete a variety of daily classroom assignments and activities and possibly produce a chapter project.

By signing this letter and returning it with your child, you agree to encourage your child by getting involved. Enclosed is an activity you can do with your child that practices how the math we will be learning in Chapter 7 might be tested. You may also wish to log on to **www.msmath2.com** for self-check quizzes and other study help. If you have any questions or comments, feel free to contact me at school.

Sincerely,

Signature of Parent or Guardian \_\_\_\_\_ Date \_\_\_\_\_

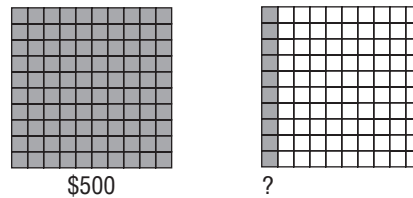
# 7 Family Activity

## State Test Practice

Fold the page along the dashed line. Work each problem on another piece of paper. Then unfold the page to check your work.

1. A nutrition label on the back of a bag of potato chips states that there are 130 calories per serving. One serving is 10 potato chips. Eddie ate 70 potato chips. Use a proportion to find how many calories are in the 70 chips. How many calories were in the chips Eddie ate?
- A 700 calories
  - B 910 calories
  - C 1,300 calories
  - D 9,100 calories

2. Joan had \$500 in her savings account last month. After putting some more money into her account this month, she now has 110% of that amount. Use the grids below to help you determine how much money Joan has in her saving account.



- How much money does Joan have now?
- A \$450
  - B \$500.50
  - C \$550
  - D \$600

*Fold here.*

### Solution

1. *Hint: In a proportion, the top and bottom numbers are always multiplied or divided by the same number to get an equivalent ratio.*

The following proportion can be used to find the number of calories in the chips Eddie ate.

$$\frac{130 \text{ calories}}{10 \text{ chips}} = \frac{? \text{ calories}}{70 \text{ chips}}$$

Since 70 is 7 times more than 10, 130 must also be multiplied by 7 to find the number of calories in 70 chips.

$$130 \times 7 = 910$$

The answer is **B**.

### Solution

2. *Hint: You can use a fraction of the total or a percentage to solve this problem.*

The area of the second grid that is shaded represents  $\frac{1}{10}$  of a whole, or 10%. Each square of the first whole represents \$5. So the 10 shaded squares in the second whole represent \$50.

$$\$500 + \$50 = \$550$$

The answer is **C**.