

## 4

## Family Letter

**Dear Parent or Guardian:**

Knowing how to solve equations is a valuable skill. Sometimes we use this skill without even realizing it. For example, we use equations to decide how far we can travel on one tank of gasoline. Relating math skills to everyday events is just one way to help students appreciate what they are learning in our class.

In **Chapter 4, Algebra: Linear Equations and Functions**, your child will be learning how to write expressions and equations, to solve one and two-step equations, to find perimeter and area, to graph functions and relationships, and to work backward to solve problems. 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 4 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 \_\_\_\_\_

# 4 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.

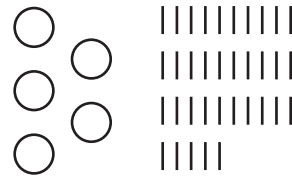
1. Yvonne went to the store to purchase \$10.00 worth of soda. It was on sale and only cost \$2.50 for each 12-pack. How many 12-packs did she buy?

Which equation could be used to solve this problem?

- A  $10n = 2.5$
- B  $\frac{n}{2.5} = 10$
- C  $2.5n = 10$
- D  $2.5 \cdot 10 = n$

2. Use the circles and tally marks below to help you solve the following equation:

$$5n = 35$$



- A  $n = 5$
- B  $n = 7$
- C  $n = 175$
- D  $n = \frac{1}{7}$

Fold here.

### Solution

1. *Hint: In order to write an equation, a letter is sometimes used to replace an unknown quantity. In this case,  $n$  is used to represent the number of 12-packs Yvonne purchased.*

You know that a certain number of 12-packs ( $n$ ) cost \$10. You also know that each 12-pack costs \$2.50. If you multiply the cost of the 12-packs by the number of 12-packs purchased ( $2.5 \times 10$ ), it should be equal to total amount of money spent (\$10).

The answer is **C**.

### Solution

2. *Hint: You should evenly divide the tally marks between the 5 circles. The number of tally marks in each circle will be the answer. This works because in order to solve a multiplication equation, you perform the inverse function, which is division.*

The tally marks divide evenly into 5 groups of 7.

The answer is **B**.