Family Letter

Dear Parent or Guardian:

"When am I ever going to use this stuff?" Students in math classes often ask this question. Integers are everywhere. We use them for golf scores. We use them when finding elevation, balancing a checkbook, or talking about temperature. There are many practical uses of integers.

In **Chapter 2, Integers**, your child will learn how to compare, order, add, subtract, multiply, divide, and find the absolute value of integers. Your child will also learn to look for a pattern when problem solving. 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 2 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,



2

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. Order the following integers from least to greatest.

$$|-4|, 3, -10, 9, 0, -3.5, 1\frac{1}{2}$$

Which option shows the integers above in the correct order from least to greatest?

A
$$-3.5$$
, $|-4|$, -10 , 0 , $1\frac{1}{2}$, 3 , 9

B
$$-3.5, -10, 0, |-4|, 1\frac{1}{2}, 3, 9$$

C
$$-10, -3.5, 0, 1\frac{1}{2}, 3, |-4|, 9$$

D
$$0, 1\frac{1}{2}, 3, -3.5, |-4|, 9, -10$$

2. During the junior varsity football game last Thursday night, Shane rushed for 35 yards in the first quarter. He lost 8 yards in the second quarter, lost 3 yards in the third quarter, and gained 15 yards in the fourth quarter. Which of the following expressions represents Shane's rushing performance in the game?

A
$$35 + 8 + 3 + 15$$

B
$$35 - (-8) - (-3) + 15$$

$$\mathbf{C} \ 35 - 8 - 3 + 15$$

$$\mathbf{D} - 35 + 8 + 3 - 15$$

Fold here.

Solution

- Hint: The farther a number is from zero in the negative direction, the smaller the value of the number. The farther a number is from zero in the positive direction, the greater the value of the number. The absolute value of a number (|n|) is the distance that the number is from zero, for example, |-2| = 2. Number lines make good tools for determining how numbers compare.
 - **A** Incorrect: -10 is less than |-4|.
 - **B** Incorrect: $1\frac{1}{2}$ is less than |-4|.
 - C Correct
 - **D** Incorrect: -3.5 is less than 0.

The answer is **C**.

Solution

2. In the quarters when Shane gained yardage, the number will be positive and when he lost yardage, the number will be negative. Choice A does not allow for any negative yardage, so it is incorrect. Choice B is the same as Choice A, because subtracting a negative number is the same as adding the number. Choice C is correct. Shane gained 35 yards (+35), then lost 8 yards (-8), then lost 3 yards (-3), then gained 15 yards (+15).

The answer is **C**.