

3 pineapples

1 serving =  $\frac{1}{2}$  pineapple

Given the information above, write a mathematics word problem for which  $3 + \frac{1}{2}$  would be the method of solution.

Answer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Scoring Guide

### Score & Description

#### Correct

Correct response – Response must include the idea:

“How many servings can you get?”

#### Incorrect

Incorrect response.

### Correct - Student Response

Given the information above, write a mathematics word problem for which  $3 + \frac{1}{2}$  would be the method of solution.

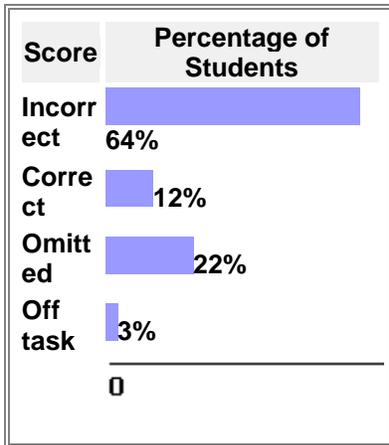
There were three pineapples, if 1 serving is  $\frac{1}{2}$  a pineapple and every body at the table had one serving. How many people had a serving of pineapple?

### Incorrect - Student Response

Given the information above, write a mathematics word problem for

which  $3 + \frac{1}{2}$  would be the method of solution.

Jane has enough pineapples to serve 6 people. If a serving is  $\frac{1}{2}$  pi how many pineapples does Jane have?



Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

**Mathematical Content Area:** *Number properties and operations* (Sub content classification: )  
**Mathematical Complexity:** *Moderate Complexity*

## Mathematical Content Area

### *Number properties and operations*

This content area focuses on students' abilities to represent numbers, order numbers, compute with numbers, make estimates appropriate to given situations, use ratios and proportional reasoning, and apply number properties and operations to solve real-world and mathematical problems. This content area also addresses number sense—comfort in dealing with numbers—and addresses students' understanding of what numbers tell us, of equivalent ways to represent numbers, and of the use of numbers to represent attributes of real-world objects and quantities. At grade 4, the focus is on whole numbers and fractions; at grade 8, the focus extends to include rational numbers; and at grade 12, the focus extends to include real numbers.

## Mathematical Complexity

### *Moderate Complexity*

Items in the moderate-complexity category involve more flexibility of thinking and choice among alternatives than do those in the low-complexity category. They require a response that goes beyond the habitual, is not specified, and ordinarily has more than a single step. The student is expected to decide what to do, using informal methods of reasoning and problem-solving strategies, and to bring together skill and knowledge from various domains.

Description	Grade	Type	Difficulty
Write mathematical word problem given a scenario	8th	Short Constructed Response	Hard