

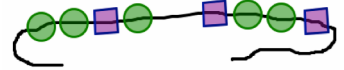
FIRST-GRADE EXAMPLES

- ❖ Is there reasoning inherent in each example?
- ❖ What level of communication is expected?
- ❖ How can you modify or implement to promote conjecturing, generalizing, or justifying?

“Solve. I took a survey of favorite colors. The choices were green, purple, and blue. Most people liked blue. More people liked purple than green. Which was the least favorite color?”

“Can you subtract in any order?”

“Look for a pattern to solve. Ana made a necklace. A bead fell off. Which bead is missing?”



These three examples are taken from a recently published first-grade national-edition textbook.

FOURTH-GRADE EXAMPLES

- ❖ Is there reasoning inherent in each example?
- ❖ What level of communication is expected?
- ❖ How can you modify or implement to promote conjecturing, generalizing, or justifying?

“Which number does not belong?” _____

10,000

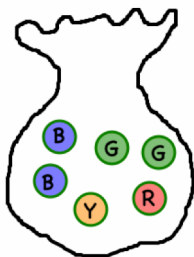
10 hundreds

ten thousand

100 hundreds

“Prem is thinking of three numbers from 1 to 10. The sum of the numbers is 14. Find the numbers.” _____

“Describe an outcome that is not possible if two marbles are chosen from the bag at a time.”



“Tell which operation you would use to solve the problem. Then solve.

Lance walked 4 dogs on Monday. He walked twice that many on Tuesday. How many dogs did he walk on Tuesday?” _____

These four examples are taken from a recently published fourth-grade national-edition textbook.

SEVENTH-GRADE EXAMPLES

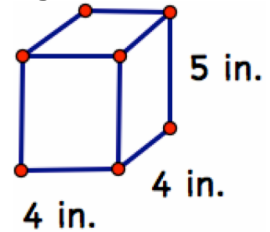
- ❖ Is there reasoning inherent in each example?
- ❖ What level of communication is expected?
- ❖ How can you modify or implement to promote conjecturing, generalizing, or justifying?

“The pattern below is made from toothpicks. How many toothpicks would be needed for the sixth term in the pattern?” _____



“Provide a counterexample to the following statement.
The sum of three fractions with odd numerators is never $\frac{1}{2}$.”

“A rectangular prism is shown. Suppose the length, width, and height are each doubled. How does the volume change?”

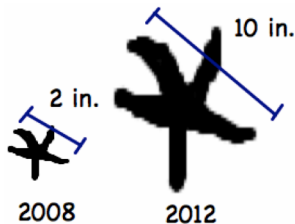


These three examples are taken from a recently published seventh-grade national-edition textbook.

HIGH SCHOOL EXAMPLES

- ❖ Is there reasoning inherent in each example?
- ❖ What level of communication is expected?
- ❖ How can you modify or implement to promote conjecturing, generalizing, or justifying?

“The illustrations show the growth of a starfish over time. Find the average rate of change in the measure over time. Predict the size of the starfish in 2014.”



“Solve. Check your solution.”

$$|a + 6| = a$$

“Simplify.”

$$i^{41}$$

These three examples are taken from a recently published Algebra II national-edition textbook.