



The balls in this picture are placed in a box and a child picks one without looking. What is the probability that the ball picked will be the one with dots?

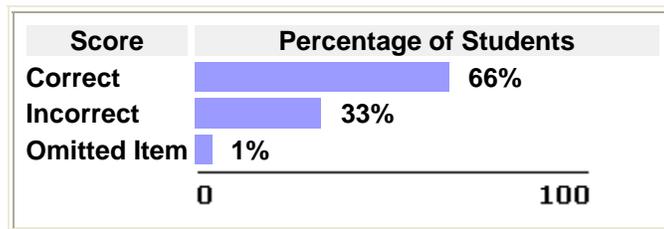
- A) 1 out of 4
- B) 1 out of 3
- C) 1 out of 2
- D) 3 out of 4

## Key

The balls in this picture are placed in a box and a child picks one without looking. What is the probability that the ball picked will be the one with dots?

- A) 1 out of 4
- B) 1 out of 3
- C) 1 out of 2
- D) 3 out of 4

### 2003 National Performance Results



Note:

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

## **Mathematical Content Area**

### ***Data analysis, statistics, and probability***

This question was classified in the data analysis, statistics, and probability content area. This content area focuses on the skills of collecting, organizing, reading, representing, and interpreting data. These topics are assessed in a variety of contexts to reflect the use of these skills in dealing with real-world information. Students are expected to use statistics and statistical concepts to analyze and communicate interpretations of data. Students are also expected to understand the meaning of basic probability concepts and applications of these concepts in problem-solving and decision-making situations. Questions emphasize appropriate methods of gathering data, the visual exploration of data, ways to represent data, and the development and evaluation of arguments based on data analysis.

## **Mathematical Ability**

### ***Conceptual understanding***

This question measures students' conceptual understanding. Students demonstrate conceptual understanding in mathematics when they provide evidence that they can recognize, label, and generate examples of concepts; use and interrelate models, diagrams, manipulatives, and varied representations of concepts; identify and apply principles; know and apply facts and definitions; compare, contrast, and integrate related concepts and principles; recognize, interpret, and apply the signs, symbols, and terms used to represent concepts. Conceptual understanding reflects a student's ability to reason in settings involving the careful application of concept definitions, relations, or representations of either.