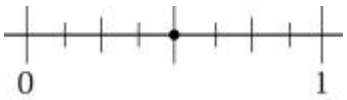
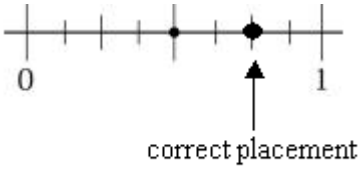
On the portion of the number line below, a dot shows where 1/2 is. Use another dot to show where 3/4 is.



Scoring Guide

Solution:
Dot correctly placed or student labels "3/4" where the dot should be placed



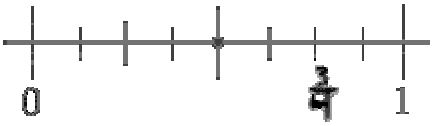
OR

Score & Description
Correct Correct response
Incorrect Any incorrect response—includes more than one dot on the number line

In this question the student needed to locate the position of 3/4 on a number line. The number line was marked from 0 to 1 in increments of 1/8, with the point 1/2 marked for reference.

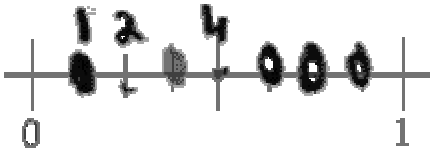
Correct - Student Response

On the portion of the number line below, a dot shows where 1/2 is. Use another dot to show where 3/4 is.



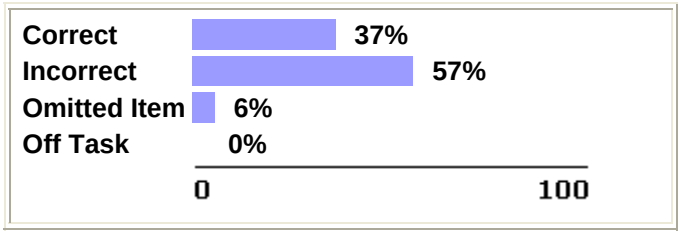
Incorrect - Student Response

On the portion of the number line below, a dot shows where 1/2 is. Use another dot to show where 3/4 is.



2003 National Performance Results

Score	Percentage of Students



Note:

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

Mathematical Content Area

Number sense, properties, and operations

This question was classified in the number sense, properties, and operations content area. This content area focuses on students' understanding of numbers (whole numbers, fractions, and decimals at all grades; integers at grades 8 and 12; real and complex numbers at grade 12), operations, estimation, and applications to real-world situations. Students are expected to demonstrate an understanding of properties of numbers and operations, generalize from numerical patterns, and verify results. In grades 8 and 12, students are also expected to demonstrate an understanding of numerical relationships expressed in ratios, proportions, and percentages. Number sense includes questions that address students' understanding of relative size, equivalent forms of numbers, and use of numbers to represent attributes of real-world objects and quantities.

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.