The diameter of a red blood cell, in inches, is 3×10^{-4}. This expression is the same as which of the following numbers?

A) 0.00003
B) 0.0003
C) 0.003
D) 3,000
E) 30,000

Did you use the calculator on this question?

○ Yes ○ No

Key

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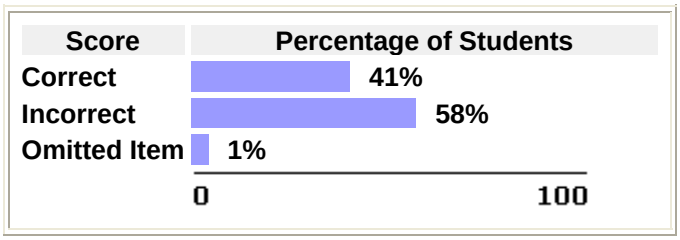
2003 National Performance Results



Note:

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

Mathematical Content Area: *Number sense, properties, and operations*
Mathematical Ability: *Procedural knowledge*

Mathematical Content Area

Number sense, properties, and operations

This question measures number sense, properties, and operations. This content area focuses on students' understanding of numbers (whole numbers, fractions, decimals, integers, real numbers, and complex numbers), operations, estimation, and applications to real-world situations. Students are expected to demonstrate an understanding of numerical relationships as expressed in ratios, proportions, and percents. Students are also expected to understand properties of numbers and operations, generalize from numerical patterns, and verify results. Number sense includes questions that address a student's understanding of relative size, equivalent forms of numbers, and use of numbers to represent attributes of real-world objects and quantities.

Mathematical Ability

Procedural knowledge

This question measures students' procedural knowledge. Students demonstrate procedural knowledge in mathematics when they select and apply appropriate procedures correctly; verify or justify the correctness of a procedure using concrete models or symbolic methods; or extend or modify procedures to deal with factors inherent in problem settings. Procedural knowledge encompasses the abilities to read and produce graphs and tables, execute geometric constructions, and perform noncomputational skills such as rounding and ordering. Procedural knowledge is often reflected in a student's ability to connect an algorithmic process with a given problem situation, to employ that algorithm correctly, and to communicate the results of the algorithm in the context of the problem setting.

	Description	Grade	Type	Difficulty
1	Identify decimal for scientific notation	8th	Multiple Choice	Medium