

Subtract:

$$\begin{array}{r} 972 \\ - 46 \\ \hline \end{array}$$

Answer: _____

Scoring Guide

Solution:

926

Score & Description

Correct

Correct response

Incorrect #4

1018 (Student added instead of subtracting)

Incorrect #3

826

Incorrect #2

934

Incorrect #1

Any incorrect response other than those described in 2, 3, and 4.

*The use of more than one incorrect category in this question enabled NAEP to gather data on common student errors. Any response that fell into one of the incorrect categories earned no credit.

Correct - Student Response

Subtract:

$$\begin{array}{r} 972 \\ - 46 \\ \hline 926 \end{array}$$

926

$$\begin{array}{r} 972 \\ 46 \\ \hline 926 \end{array}$$

Scorer Comments:

This paper was scored as correct because the student correctly subtracted 46 from 972.

Incorrect #4 - Student Response

Subtract:

$$\begin{array}{r} 972 \\ - 46 \\ \hline \end{array}$$

$$\begin{array}{r}
 972 \\
 46 \\
 \hline
 1018
 \end{array}$$

Scorer Comments:

In this paper, the student added instead of subtracted. This particular response was coded to gather data on common student errors, but the paper received no credit.

Incorrect #3 - Student Response

Subtract:

$$\begin{array}{r}
 972 \\
 - 46 \\
 \hline
 826
 \end{array}$$

Scorer Comments:

In this paper, the student made a subtraction error by unnecessarily borrowing from the 9 in the hundreds place and got 826 as their answer. This particular response was coded to gather data on common student errors, but the paper received no credit.

Incorrect #2 - Student Response

Subtract:

$$\begin{array}{r}
 972 \\
 - 46 \\
 \hline
 934
 \end{array}$$

Scorer Comments:

In this paper, the student made a subtraction error and put 934 as their answer. This particular response was coded to gather data on common student errors, but the paper received no credit.

Incorrect #1 - Student Response

Subtract:

$$\begin{array}{r}
 972 \\
 - 46 \\
 \hline
 \end{array}$$

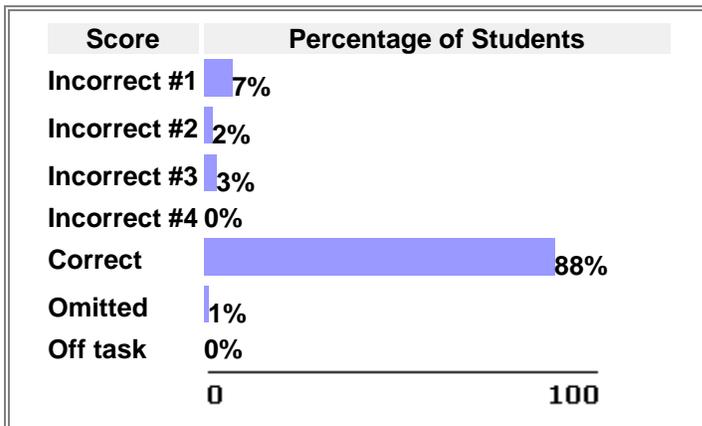
856

8912
872
46
—
50

Scorer Comments:

Papers scored as incorrect #1 received no credit and represent incorrect responses different than those described under incorrect #4, incorrect #3, and incorrect #2.

2005 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 properties and operations* (Sub content classification:)
Mathematical Complexity: *Low 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

Low Complexity

This category relies heavily on the recall and recognition of previously learned concepts and principles. Items typically specify what the student is to do, which is often to carry out some procedure that can be performed mechanically. It is not left to the student to come up with an original method or solution.

Description	Grade	Type	Difficulty
Subtract two-digit number from three-digit number	8th	Short Constructed Response	Easy