

<b>x</b>	<b>y</b>
0	-3
1	-1
2	1

Which of the following equations is true for the three pairs of  $x$  and  $y$  values in the table above?

- A)  $3x + 2 = y$
- B)  $3x - 2 = y$
- C)  $2x + 3 = y$
- D)  $2x - 3 = y$
- E)  $x - 3 = y$

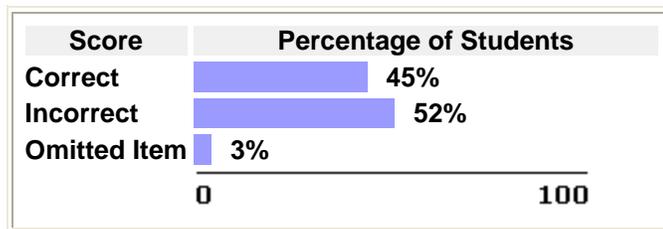
**Key**

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- ▶ D)  $2x - 3 = y$
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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:** *Algebra and functions*  
**Mathematical Ability:** *Conceptual understanding*

## Mathematical Content Area

### *Algebra and functions*

This question measures algebra and functions. This content area extends from work with simple patterns, to basic algebra concepts, to sophisticated analysis. Students are expected to use algebraic notation and thinking in meaningful contexts to solve mathematical and real-world problems, addressing an increasing understanding of the use of functions. Other topics assessed include using open sentences and equations as representational tools and using the notion of equivalent representations to transform and solve number sentences and equations of increasing complexity.

## 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.

	<b>Description</b>	<b>Grade</b>	<b>Type</b>	<b>Difficulty</b>
1	Relate equation to ordered pairs	8th	Multiple Choice	Medium