



**It's Math! It's Reading!
No, It's SuperTest!**

NCLB (*No Child Left Behind*) has prompted states to administer standardized assessments in all subject areas. Math is no different. However, these tests are not simply numbers piled on top of each other. They require comprehension of written materials, understanding of mathematical functions and notations when written in words, and an ability to take the written word and transform it into a mathematical sentence or sentences. Students must comprehend spoken and written concepts well enough to think mathematically about them. The following information provides a few examples of states' incorporation of reading in standardized state mathematics tests. Please visit the sites that accompany each for additional information regarding the state tests discussed in this article, or visit your state's Web site for information specific to your state.

Texas and Colorado

Starting in the third grade, students have to be able to read and understand problems, tables, charts, graphs, grid maps, and mathematical terminology well enough to analyze the information given and answer questions, which may or may not require a solution. For example, the **Texas Assessment of Knowledge and Skills**, or TAKS, third grade math assessment included the following test item from a recent year:

How is the number 520,804 written in words?

- A. fifty-two thousand, eight hundred four
- B. five hundred two thousand, eight hundred forty
- C. five hundred twenty thousand, eight hundred four
- D. five thousand two hundred eighty-four

Another test item was similar to the one below:

Evaristo went to see a movie. He had \$13 when he arrived at the movie theater. When he left, he had \$6. If the movie ticket cost \$5, which number sentence would best show how much he spent on snacks at the movie?

- A. $13 + 6 + 5 = \underline{\quad}$
- B. $13 - 6 - 5 = \underline{\quad}$

Colorado Department of Education

State Assessment Tool – Colorado
State Assessment Program (CSAP)

<http://www.cde.state.co.us/cdeassess/csap/>

Texas Education Agency

Student Assessment Division

State Assessment Tool – Texas
Assessment of Knowledge and Skills
(TAKS)

<http://www.tea.state.tx.us/student.assessment/>

- C. $13 - 6 + 5 = \underline{\quad}$
D. $6 - 5 + 13 = \underline{\quad}$

Reading comprehension is such an integral part of both the TAKS and the **Colorado Student Assessment Program**, or CSAP, mathematics test that oral instruction of either is allowable to any student without having to receive special permission from the state. Note the following excerpt from the Colorado Department of Education's Web site:

"Reading items within the CSAP is an allowable accommodation for certain content areas only. ALLOWABLE ACCOMMODATIONS include reading aloud or signing the directions, word problems, designated writing, math and science questions and glossary terms with their definitions on the Mathematics, Science and specified sections of the Writing CSAP."

Oregon

The **Oregon Statewide Assessment System** (OSAS), to date, is one of the most thorough and thoughtful assessment systems in the country, and includes a process for determining research-based accommodations. Having test items read aloud to students has been an allowable accommodation since its inception. A sample test item found on the Oregon Department of Education Web site for third grade follows:

Oregon Department of Education
Assessment/Testing
State Assessment Tool – Oregon
Statewide Assessment System (OSAS)
<http://www.ode.state.or.us/search/results/?id=169>

Bill earned 2 dollars for washing the floor. Mike earned 3 dollars for washing the floor and cleaning the windows. How are chores and money related?

- A. The more chores done, the more money the person made.
- B. The fewer chores done, the more money the person made.
- C. No matter how many chores were done, each person earned the same.
- D. Doing difficult chores did not help a person earn money.

California, Florida, and New York

Other states, including **California**, **Florida**, and **New York**, have made oral presentation an acceptable accommodation on the mathematics portion of their statewide assessments. All have cited that the assessment is to measure math skills, not reading skills, and therefore reading the test aloud to students who would be challenged by insufficient reading skills is acceptable and makes the scores more reflective of students' math knowledge and abilities. In this, state boards of education continue to implicitly acknowledge that reading abilities are one key to being able to accurately reflect math ability on their state's assessment.

California Department of Education

Testing & Accountability

State Assessment Tool – Standardized Testing and Reporting (STAR)

<http://star.cde.ca.gov/>

Florida Department of Education

Accountability, Research, & Measurement

Assessment and School Performance

State Assessment Tool – Florida Comprehensive Assessment Test (FCAT)

<http://www.firn.edu/doc/sas/sasshome.htm>

New York State Education Department

Office of State Assessment

State Assessment Tool – Standards, Assessment, and Reporting (SAR)

<http://www.emsc.nysed.gov/sar/>

Note: The information contained in the above report was drawn from information provided to the public by the various state departments listed. We have intentionally included no opinions or extrapolations of the information made available. To the best of our knowledge, all of the information provided is accurate as of the date of this document's creation, June 2005. However, in the event that any possible error is noted, please contact us at the e-mail address below, and we will look into the situation and make appropriate modifications.

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