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Algebra 1 to be required for all 8th-graders

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(07-09) 20:50 PDT -- All California eighth-graders in public school will have to take Algebra 1 beginning in 2011 under a policy approved Wednesday by the state Board of Education in an 8-1 vote.

The board decided to make algebra testing mandatory in the eighth grade over the strong objections of Jack O'Connell, the state's elected schools chief.

O'Connell accused the board of demanding high standards while failing to tie them to extra resources needed to fix a shortage of math teachers and prepare thousands of disadvantaged kids for the rigorous class.

"I fear that we're setting our students up for failure," O'Connell said. "I pray that I'm wrong."

But board President Ted Mitchell said the move shows there is "unequivocally one set of standards for all kids, no matter their ZIP code, race or income level."

Ordered by the federal government to bring California's eighth-grade math testing into compliance with No Child Left Behind, the board endorsed the mandatory Algebra 1 testing over a more moderate approach urged by O'Connell, math instructors from around the state and the California School Boards Association.

But the board members sided with Gov. Arnold Schwarzenegger, who appointed them, and in a rare move overruled the strong recommendations of the state superintendent. The governor had asked the board to make algebra mandatory and he expressed satisfaction with the result.

"California's children have already proven that when we set the bar high, they can do anything," Schwarzenegger said.

The decision was also supported by business groups and the chancellor of the community college system, Diane Woodruff.

Algebra 1 has been a high-school graduation requirement in California since 2004. Students are encouraged to take it in eighth grade, but can take it any time before graduating.

There are nearly 500,000 eighth-graders in public schools. Currently, 52 percent take Algebra 1. Each spring, they take the California Standards Test for Algebra 1.

Eighth-graders who aren't enrolled in Algebra 1 take a different exam: the California Standards

Test for general math.

This year the U.S. Department of Education found that the general math test was out of compliance with the No Child Left Behind Act because it measured only sixth- and seventh-grade material.

So California was given a choice: Pump up the general math test to include Algebra 1 items, or require everyone to take the Algebra 1 test - which in effect requires all eighth-graders to take Algebra 1.

Failure to comply - that is, if the board had done nothing by the end of this month - would have disqualified California from several federal programs and placed most middle schools on a list of failing campuses that could ultimately be restructured from the bottom up.

"I have strong reservations about *requiring* all eighth-grade students to take Algebra 1 within three years without also offering any additional changes, support or resources for our public school system," O'Connell told the state's school superintendents in a two-page letter Tuesday.

He said that most eighth-graders who take general math already struggle with the material and that requiring them to take an even tougher course without extra help - tutoring, for example - is "highly irresponsible."

Among the eighth-graders in general math, he said, 86 percent of black students and 84 percent of Latinos score below proficient on the state test.

Shelley Kriegler, director of the UCLA Math Content Programs for Teachers and the author of a book on algebra readiness, urged the state board not to require Algebra 1 so early.

"Too many of California's students are not prepared to be successful in an Algebra 1 course in eighth grade," she wrote. "That doesn't mean they won't be. It just means they are not ready yet."

Nor does California have enough qualified math teachers to teach Algebra 1 to all eighth-graders, said Kathy Woods, president of the California Mathematics Council, which represents about 10,000 math instructors.

"There's a lot of us who are concerned about it, especially teachers in the trenches," said Woods, noting that algebra is still so poorly taught that even well-prepared students often feel lost.

Community College Chancellor Woodruff took the opposite view, telling the state board that the requirement could be a "catalyst to change our curriculum and teaching techniques to help students succeed."

Voting for the new algebra requirement were board members Ted Mitchell, Ruth Bloom, Yvonne Chan, Gregory Jones, David Lopez, Kenneth Noonan, Johnathan Williams and outgoing student

representative Monica Liu. (The Board of Education is the only state agency with a student member permitted to cast a valid vote.)

Opposing the requirement was James Aschwanden, who said that some eighth-graders aren't developmentally ready to take on Algebra 1.

He and the other board members "have an honest disagreement, a philosophical disagreement," he said.

Board members Don Fisher and Alan Bersin were absent.

Chronicle staff writer Samantha Sondag contributed to this report. E-mail Nanette Asimov at anasimov@sfchronicle.com.

<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/07/10/MNM811MDBJ.DTL>

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My 8th grader takes Algebra 1. I think it counts as 9th grade math. What are the subjects in the eighth grade? Math: Pre Algebra, Algebra I, or Geometry. In 8th grade you learn in math pre-algebra, algebra measurement, and geometry etc. In English language arts you begin how to research, practicing the critical lens quotation science you learn earth science and life science. For social studies you learn about wars world war 1 and world war 2. You are going into eighth grade to learn algebra one you want to take as much math as possible how can you pass algebra one so that by the time school starts you can be ready for geometry? Take notes, and get Cliff Notes on Algebra. Is pre algebra advanced for seventh grade? Pre-algebra and algebra 1 worksheets for 8th graders. Download Now >>>. Probability & Stats. 8th grade probability worksheets for print and practice. Download Now >>>. Pythagorean Theorem. 8th grade pythagorean worksheet printables for kids. Download Now >>>. Ratios & Proportions. Eighth grade worksheets on ratios and percentages for tests. Download Now >>>. MATH WORKSHEETS FOR EIGHTH 8th GRADE - PDF. Math worksheets for Eighth grade children covers all topics of 8th grade such as: Quadratic equations, Factorisation, Expansion, Graphs, Decimals, Probability, Surface areas, Scientific notation The Algebra I Regents test is intended for ninth graders but is also taken by eighth graders who complete advanced coursework. Last year was the first time Success Academy eighth graders took the exam, with 100% of students taking the test, compared with only 34% of eighth graders citywide. The mayor has promised "Algebra for All" by 2022, an initiative that pledged access for all city students to algebra courses in eighth grade. The administration's emphasis acknowledged the crucial place algebra holds as a gateway to higher-level math, in an age when math and technology skills are increasingly important to learning, employment and earnings. "I'm proud of our eighth graders," said Eva Moskowitz, founder and CEO of Success Academy. Students in 8th grade High School Algebra understand and apply the Pythagorean theorem, and use quadratic functions to model and solve problems. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5(1/3)^3$ to hold, so $(5^{1/3})^3$ must equal 5. Instructional Note: Address this standard before discussing exponential functions with continuous domains. M.A18.12. Rewrite expressions involving radicals and rational exponents using the properties of exponents. "Algebra 1" was optional in 8th grade and mandatory in 9th grade. Because of the fact that curriculum differs throughout the states and even between school districts, this is a question that you should ask your school counselor. They should know the specifics of what classes you are allowed to take and when you are allowed to take them. Edit: if you are currently taking both pre-algebra and algebra 1 and you are wondering why your school district allows this then it's probably still a question for your counselor. 412 views · View upvotes. Some Algebra concepts are hard for 8th graders probably because many of them aren't willing, disciplined or motivated enough to do the work, which can be said for many students in this country, regardless of their age. 2.3K views · View upvotes.