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# SENATE COMMITTEE ON EDUCATION

Senator Carol Liu, Chair  
2015 - 2016 Regular

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**Bill No:** AB 220  
**Author:** Holden  
**Version:** April 7, 2015  
**Urgency:** No  
**Consultant:** Lynn Lorber  
**Hearing Date:** June 10, 2015  
**Fiscal:** Yes

**Subject:** Pupil instruction: mathematics: Algebra

## SUMMARY

This bill modifies high school graduation requirements to authorize the completion of a course in integrated mathematics that includes Algebra I, rather than requiring completion of a traditional stand-alone Algebra I course.

## BACKGROUND

Existing law:

- 1) Requires completion of two courses in mathematics as a condition of graduation from high school. (Education Code § 51225.3)
- 2) Requires that at least one course, or a combination of the two courses, in mathematics required for graduation meet or exceed the rigor of the content standards for Algebra I that was adopted by the State Board of Education in 1997. (EC § 51224.5)
- 3) Established the Academic Content Standards Commission for the purpose of developing the California Common Core Standards in English language arts and mathematics, and required the State Board of Education to reject or adopt those standards by August 2, 2010. (EC § 60605.8)
- 4) Authorizes the Superintendent of Public Instruction to recommend modifications to the common core standards in mathematics, and authorizes the State Board of Education to adopt modifications to the standards. (EC § 60605.11)

## ANALYSIS

This bill modifies high school graduation requirements to authorize the completion of a course in integrated mathematics that includes Algebra I, rather than requiring completion of a traditional stand-alone Algebra I course. Specifically, this bill:

- 1) Allows students to meet the graduation requirement by completing at least one course, or a combination of the two courses required for graduation that meets or exceeds the rigor of Algebra I or Mathematics I that is aligned to the California common core standards.

- 2) Provides that a student who completes a course in Algebra I or Mathematics I, or mathematics courses of equal rigor, before 9<sup>th</sup> grade is exempt from the Algebra requirement but not from the requirement to take two math courses in grades 9-12.
- 3) Deems a student who has completed a course or courses that meet or exceed the prior standards for Algebra I (adopted by the State Board of Education (SBE) in 1997) as having met the revised requirement (above) for one course in mathematics.

**STAFF COMMENTS**

- 1) **Need for the bill.** According to the author, “current law requires students to complete at least one course, or a combination of two courses, in Algebra I prior to receiving a high school diploma. As part of California’s efforts to better prepare our students for college and careers after high school graduation, bills were enacted in the last four years to revise and adopt new academic content standards. In August of 2010, the SBE adopted new academic content standards for mathematics. The new standards supersede the 1997 mathematics content standards and as a result, make current law inconsistent with the current SBE-adopted mathematics content standards.”
- 2) **Course sequencing.** The California common core standards organize standards for higher math in two ways: as model courses and in conceptual categories. The model courses include three courses in the traditional pathway (Algebra I, Geometry, and Algebra II), three courses in the integrated pathway (Mathematics I, II, and III), and two advanced courses (Advanced Placement Probability and Statistics and Calculus). There are six conceptual categories, which include number and quantity, Algebra, functions, modeling, geometry, and statistics and probability. Conceptual categories cross traditional course boundaries, thereby allowing an integrated pathway that provides a series of courses with each course containing standards from the six conceptual categories.  
<http://www.cde.ca.gov/be/st/ss/documents/ccssmathstandarAug2013.pdf>

Discipline	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Algebra I Mathematics I	Possible	Possible	Possible	Possible	Possible	Possible
Geometry Mathematics II		Possible	Possible	Possible	Possible	Possible
Algebra II Mathematics II			Possible	Possible	Possible	Possible
Advance Placement Probability and Statistics				Possible	Possible	Possible
Calculus				Possible	Possible	Possible

- 3) **Prior academic content standards in mathematics.** This bill deems a student who has completed a course or courses that meet or exceed the prior standards for Algebra I (adopted by the SBE in 1997) as having met the revised requirement (above) for one course in mathematics. This provision is necessary to ensure that

any student who completed Algebra I pursuant to the prior SBE-adopted standards (prior to the implementation of the California common core standards).

- 4) ***Fiscal impact.*** According to the Assembly Appropriations Committee analysis, this bill would impose “minor, absorbable, Proposition 98 costs to school districts to modify procedures to comply with the revised graduation requirement. The State has already begun implementation of the California Common Core Standards for mathematics and provided funds to school districts for this purpose. Any costs associated with this bill should be absorbed within existing resources.”
- 5) ***Related and prior legislation.*** AB 1599 (Education Committee, Ch. 327, Statutes of 2014), until the July 2, 2014 amendments, included a provision that was very similar to this bill.

**SUPPORT**

Association of California School Administrators  
California Catholic Conference  
California School Boards Association  
California State PTA  
California Teachers Association  
EdVoice  
Silicon Valley Community Foundation  
Superintendent of Public Instruction Tom Torlakson (source)

**OPPOSITION**

None received.

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