

# Mathematics Update

School Committee Report  
March, 2018

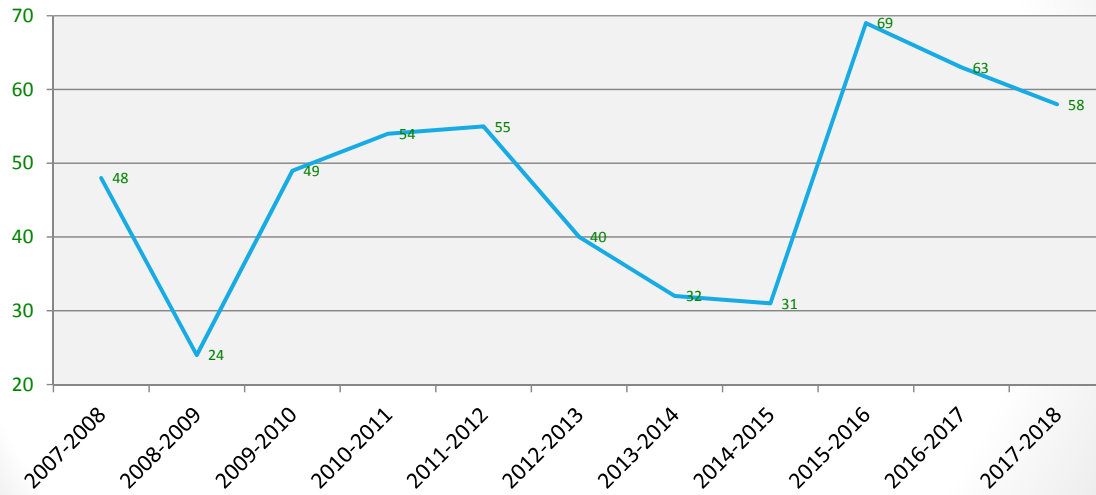
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Year	Total 11/12th grade <i>Based on Oct enrollment</i>	AP Calculus AB	AP Calculus BC	Total # AP Calculus Enrollment	Total % of students in AP Calculus
2007-2008	635	47	1	48	8%
2008-2009	626	24	0	24	4%
2009-2010	610	35	14	49	8%
2010-2011	595	34	20	54	9%
2011-2012	623	26	29	55	9%
2012-2013	648	26	14	40	6%
2013-2014	631	32	0	32	5%
2014-2015	624	21	10	31	5%
2015-2016	671	48	21	69	10%
2016-2017	627	25	38	63	10%
2017-2018	604	24	34	58	10%

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## Students in AP Calculus

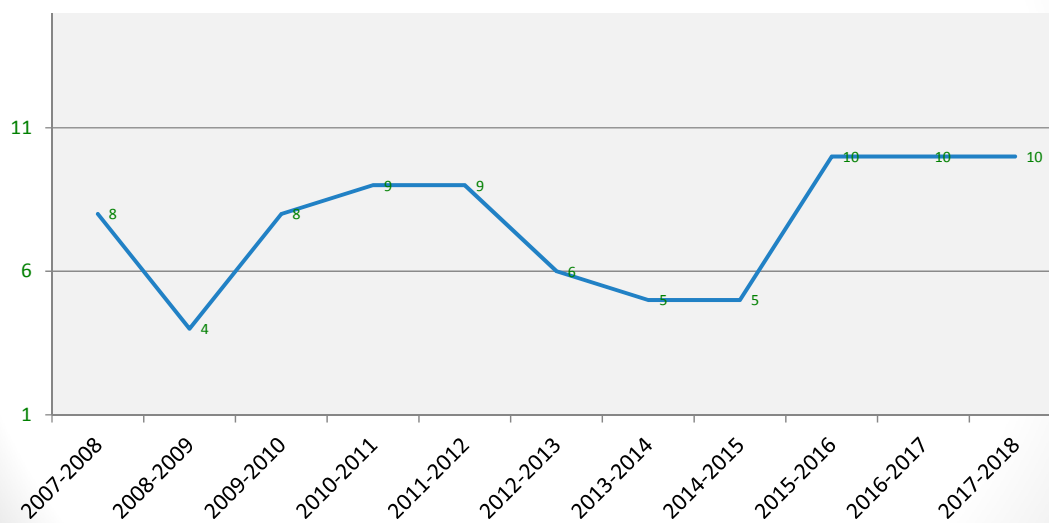
### Number of students by school year



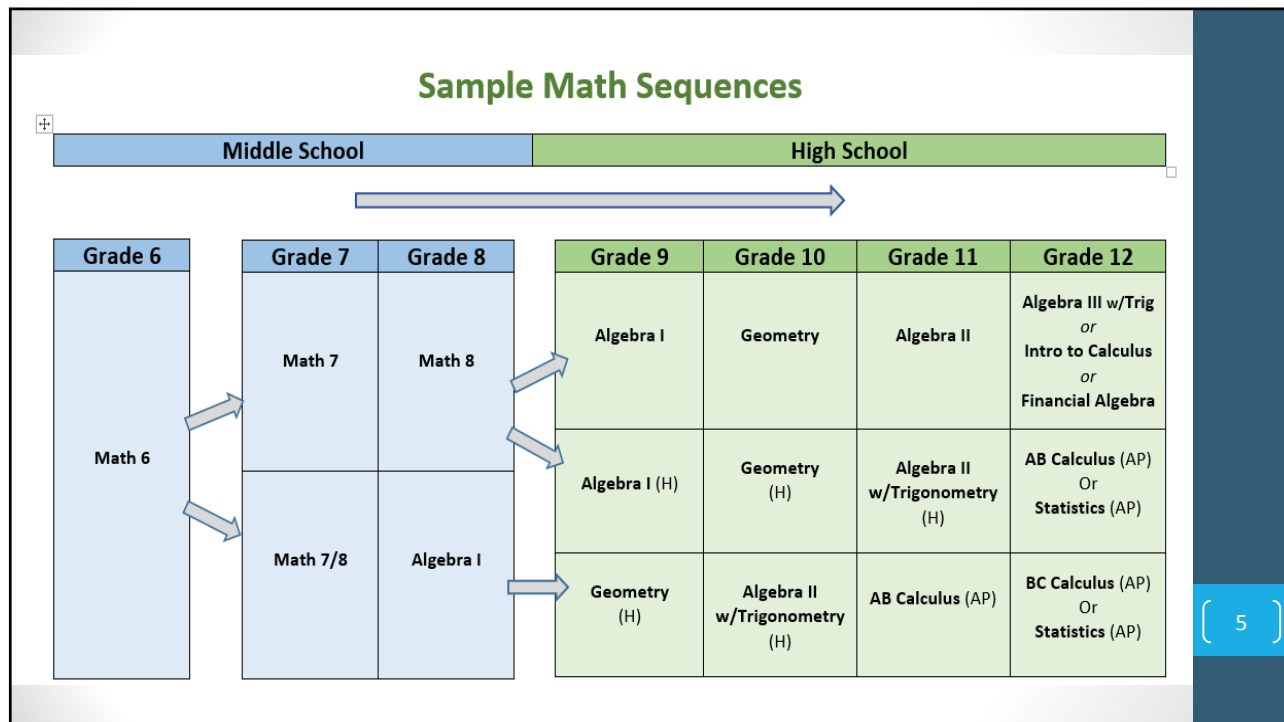
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## Students in AP Calculus

### Percentage of 11/12<sup>th</sup> grade by school year



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## Number Sense: a predictor of future success

- The fact is, students who lack a strong number sense have trouble developing the foundation needed for even simple arithmetic, let alone more complex mathematics. In one study of 180 seventh-graders conducted by the University of Missouri in 2013, researchers found that, “those who lagged behind their peers in a test of core math skills needed to function as adults were the same kids who had the least number sense or fluency way back when they started first grade.” (Neergaard, 2013)
- . . . coming from a focus on mathematics education for children with learning disabilities, Russell Gersten & David Chard wrote in 1999, “Just as our understanding of phonemic awareness has revolutionized the teaching of beginning reading, the influence of number sense on early math development and more complex mathematical thinking carries implications for instruction.” (Gersten & Chard, 1999)

*Quotes from a recent article by Stanford mathematician Keith Devlin*