

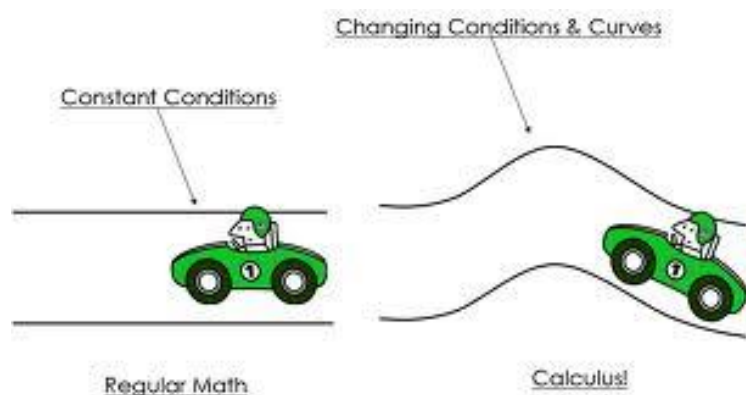
## Do you have GANAS? AP Calculus: It's as easy as 3, 4, 5

In 2013, 25 of the 82 AP Calculus AB students earned a 5 at Morton East HS, one student earned a perfect score (all points earned on the exam), and another student passed the exam with a patch on her eye.

In 2016, 75 out of 119 AP Calculus students earned an A, B, or C in AP Calculus AB/BC and 63% of the Calculus students passed the AP exam.

In 2017, the 108 Calculus AB and 13 Calculus BC students are aiming for A's, B's, and C's with 100% passing the exam and no injuries.

Regardless of your major, *colleges will be more impressed* by AP Calculus on your transcript than any other single course. Studies show the best predictor of success in (and completion of) college is the highest level of math success in high school, so admissions offices (and scholarship committees) seek out AP Calculus students.



You can communicate using symbols and language that most people can't understand.

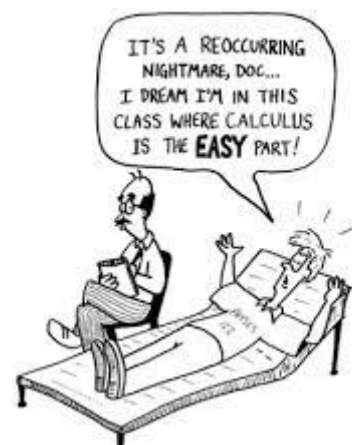
Learn about: IT; milk and cookies; everything happening in 3's; crits and pips; never go back to your exes; your best friend; annoying brothers & sisters; it's cold outside; x's with x's and y's with y's; third derivative of position

The latest brain research shows that new skills slip out of your brain in as little as 6 weeks of disuse. It gets much worse if you don't do math for a year. No other class will give you the practice you need to retain the math skills you learned in Advanced Algebra and PreCalculus. NOT taking Calculus immediately after Precalc will make college more difficult, since you will either retake Precalc in college before taking Calc, or struggle to recapture those skills while taking Calc.

Despite public perception, Calculus is not very difficult. What's difficult is that you just need to finish 12 years of math in 11 years or less to take Calculus in high school.

Advice from former Calculus students:

- "Calculus is easy, algebra is the hardest part."
- "When in doubt, derive...or antiderive."
- "If you can get through Calculus, you can get through anything."
- "Don't be overwhelmed by the material, just remember to come in for help."



## AP Calculus AB vs. AP Calculus BC

A – Limits & Continuity

B – Derivatives & Anti-Derivatives

C – Polynomial Approximations & Series

AB	BC
Learn 1 semester of college Calculus over the entire school year	Learn 2 semesters of college Calculus over the entire school year (this means working at a pace twice as fast as AB)
Graphing Calculator Required	Graphing Calculator Required
<p>Summer Work</p> <ul style="list-style-type: none"> <li>Approximately 90 problems in which students demonstrate knowledge of Algebra, Advanced Algebra, &amp; Trigonometric topics</li> <li>Students recommended to attend Summer AB Boot Camp to review knowledge of Algebra, Advanced Algebra &amp; Trigonometric topics (NOTE: students who attended boot camp had significantly higher AP scores than those who did not).</li> </ul>	<p>Summer Work</p> <ul style="list-style-type: none"> <li>Approximately 90 problems in which students demonstrate knowledge of Algebra, Advanced Algebra, &amp; Trigonometric topics AND Complete problems from Unit 1</li> <li>Students REQUIRED to attend Summer BC Boot Camp to learn topics for Unit 1: Functions, Graphs &amp; Limits, including parametric, polar, and vector forms of functions</li> </ul>
<p><i>Units learned by students during the school year</i></p> <p>UNIT 1: Functions, Graphs &amp; Limits UNIT 2: Differentiation UNIT 3: Applications of Derivatives  UNIT 4: Definite Integrals  UNIT 5: Differential Equations &amp; Mathematical Modeling UNIT 6: Applications of Definite Integrals</p>	<p><i>Units learned by students during the school year</i></p> <p>UNIT 2: Differentiation (including parametric, polar, and vector equations) UNIT 3: Applications of Derivatives (including parametric, polar, and vector equations) UNIT 4: Definite Integrals (including polar &amp; parametric equations) UNIT 5: Differential Equations &amp; Mathematical Modeling UNIT 6: Applications of Definite Integrals (including logistic, parametric, and vector equations) UNIT 7: L'Hôpital's Rule and Improper Integrals UNIT 8: Polynomial Approximations &amp; Series</p>
Various Colleges/Universities equate an AB score of 5 with a BC score of 3	
No Colleges/Universities give credit for: AB score of 1 or 2	No Colleges/Universities give credit for: BC score of 1 or 2
Various Colleges/Universities give credit for: AB score of 3,4,or 5	Almost all Colleges/Universities give credit for: BC score of 3,4,or 5 (if the AB subscore is 4 or 5)
Colleges/Universities consider AB to be equivalent to Calculus I (1 <sup>st</sup> semester Calculus)	Colleges/Universities consider BC to be equivalent to Calculus I & Calculus II (1 <sup>st</sup> & 2 <sup>nd</sup> semesters of Calculus)