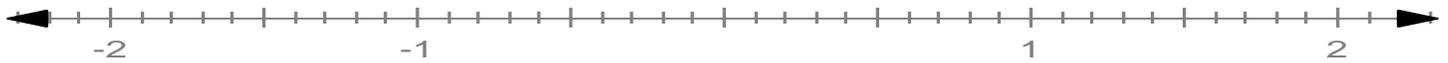


**Course Description:** This course prepares students to take the AP Calculus BC Test in May. This test covers material equivalent collegiate introductory calculus courses, *at a rapid pace*. Topics to be studied include limits, functions, differentiation, integration, series and the application of these concepts. Thorough knowledge of all prerequisite mathematics is a must. While designed to prepare students for the BC test, students may elect to take the AB test depending on their level of success, choice of college, etc. Students are expected to take one of the AP tests at the conclusion of the year.

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	**Necessary supplies:**	
	-Notebook or three-ring binder	
	with paper	
	-Graph paper (for your benefit)	
	-Graphing calculator—*needs to be*	
	*AP approved*	
	== == == == == == == ==	



**Key points for success:**

1. Be on time and prepared for class.
2. Complete assignments prior to discussing them in class.
3. Work together, study together, test alone. Assignments for which points will be awarded will be designated as group or individual when necessary.
4. During class, electronic devices (including tablets, phones, calculators, etc.) are allowed for educational purposes only.



*Contact Information:*  
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Website: *Homework Matrix* and *Google Classroom*

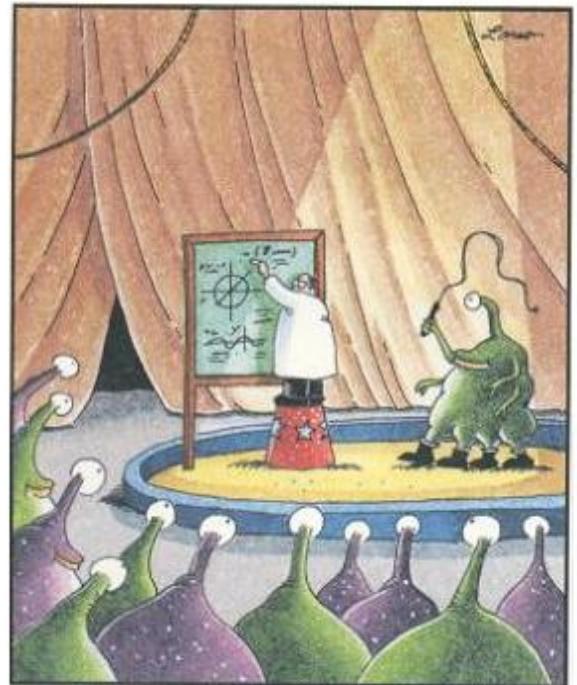
Find me on Facebook:  
[www.facebook.com/greg.christy319](http://www.facebook.com/greg.christy319)

Follow me on Twitter: [www.twitter.com/gchristy2](http://www.twitter.com/gchristy2)

**Evaluation:** Your evaluation will be based on a series of tests, quizzes, homework, and projects. Grades will be assigned based on a cumulative point system in which each point carries the same weight (i.e.—1 test point=1 quiz point=etc.). Point values for each assignment, test, quiz, etc. will vary.

**Grading Scale:** Follows the board approved grading scale found on in your handbook. *Note: A “P” may be awarded in extraordinarily extenuating circumstances only, and at most once per student.*

*Mathematics is the language with which  
God wrote the universe.  
-Galileo Galilei-*



Abducted by an alien circus company, Professor Doyle is forced to write calculus equations in center ring.

AP Calculus requires a strong foundation in nearly all types of mathematics preceding it, including geometry (coordinate and otherwise), algebra (symbolic manipulation, related rules and laws, and ties to the coordinate system), and trigonometry (evaluation of trig functions and inverse trig functions at common values related to  $\pi$ ). Completing the following list of problems will review a variety of topics in preparation for calculus, some topics which you have studied within the last year, some of which you haven't studied for a while. Some of the material will be used immediately in the study of calculus while some will not be used until much later in the year, however all of it is prerequisite material. A grade will be taken for this work to start next year, but no formal quiz or test will be taken over the material. You will be expected to be fluent in this content, otherwise the study of calculus will be severely compromised.

If you have questions, feel free to contact me at any time throughout the summer at [gchristy@sylvaniaschools.org](mailto:gchristy@sylvaniaschools.org). I will respond as soon as I can (it is summer, so it may take a few days☺). Have a good summer and I hope you are looking forward to next year as much as I am!

**\*\*Expect a minimum of 3 hours to complete all the work.\*\***

**Precalculus Review and Calculus Preview (from the AP Calculus text)**

**Calculus Prerequisites:**

p. 37: 17, 18, 21, 29, 37, 38, 40

**Limits:**

p. 47: 6, 8, 11

p. 91: 9-22, 27-30, 35, 37-39, 42, 53-57 odd, 60, 63-70

**Logarithms, Exponential Functions, and Transcendental Functions**

p. 331: 21, 27-30, 39, 42

p. 358: 2, 6, 12

p. 368: 28, 32

p. 379: 27-30

**Series**

p. 604: 2-8 evens, 29-33

**Parametric and Polar Functions and Graphs**

p. 758: 26-30 evens, 62-74 evens

Complete the listed problems, showing all appropriate work. Whenever possible, try to complete the work without a calculator as more than half the AP Calculus exam does not allow the use of any device.