

## AP Calculus 2012-2013 Summer Assignment

Dear AP Calculus colleague,

In order to keep our mathematical acumen healthy and to provide more instructional time and pre-examination practice time, I am asking you to undertake the following assignments during the summer vacation period. The purpose of this chapter is three-fold:

1. To establish the library of functions that we will use in Calculus (linear, exponential, power, logarithmic, trigonometric, polynomial and rational).
2. To review the algebraic concepts important to using and understanding these functions (what is a function, domain, range, composition, inverse, and manipulation).
3. To maintain familiarity with the philosophical framework of expressing mathematics using the "Rule of Four" (algebraic, numerical, graphical, and verbal).

Please **read** each section first. **Study** the examples. Then do the problem set assigned. Make sure your work is neat and easy for you and me to read. Since I am assigning mostly odd-numbered problems, you will have solutions to reference. If you have a question during the summer, I invite you to e-mail it to me at [tajames@tajames.net](mailto:tajames@tajames.net) Check our class web site for more information: [tajames.net](http://tajames.net) and follow the links. ***Form study groups and work together!***

You have **6** assignments (82 problems ~ 12 problems per week or less than 2 problems/day avg):

Key: (3n) means every third problem (not necessarily multiples of 3). o means "odd"

1. Section P.1	Page 8, # 1-4, 19-37o.	14 problems
2. Section P.1	Pages 8-9, #61-75o.	8 problems
3. Section P.2	Pages 16-17, #32-44 (3n), 59-68 (3n) 79, 83, 85, 89, 92.	14 problems
4. Section P.3	Pages 27-28, #5, 11, 19-35o, 39-46.	19 problems
5. Section P.3	Pages 28-30, #47-63o, 67-70, 74, 82-84, 93, 94	19 problems
6. Section P.4	Pages 34-36, #1-4, 7, 13, 17, 20.	8 problems

**Due Dates: Thursday, July 5, 2012. Assignments 1-2 are due.**

**Thursday, July 19, 2012. Assignments 3-4 are due.**

**Tuesday, August 7, 2012. Assignments 5-6 are due. This is the first day of school.**

Mail or deliver your assignments to Chaffey High School  
1245 N. Euclid Avenue  
Ontario, CA 91762  
Attn. Tom James

The extra time we gain makes learning Calculus much less stressful, and therefore more interesting and enjoyable. It is an honorable task that we take on; one that is worthy of your talent and commitment. I look forward to working with you in 2012-2013. *Have great summer.*

Sincerely,  
Tom James