

12th Grade Assignment – Week #9

Group Assignments: *for Tuesday or Thursday*

- Do the following problems in the given order. See how far you can get!
 - 1) At the end of this week's first lecture, I spoke about how we can use the derivative to find the slope at any point of a curve. We can now take this further.
Discuss how to use the derivative to find, and then calculate, the exact vertex of the parabola $f(x) = 3x^2 - 7x - 5$
 - Do *Discovery Sheet #10*
 - Do *Discovery Sheet #11*
 - Do the *Calculus Challenge Sheet* (found at the end of the *Calculus Discovery Sheet* document)

Individual Work

- Do the *Calculus Review Sheet* (found at the end of the *Calculus Discovery Sheet* document).
- Begin to prepare for the Calculus Exam, which will be found on next week's assignment.
- As much as you can, complete any of the group assignment that your group didn't finish.
- Create a "summary page" for the week.
- If you have the time and desire, watch the "extra lecture" for the week (W09 – L3), where I give proofs of the *Summation Formulas*.