

The Second Group Project

This is due in class Tuesday October 24. You are to work in your present groups that were assigned the last time we handed out the playing cards. These groups should not be any larger than 4 persons and preferable of size 4 exactly. Each group will turn in one paper with all your names on it. To try to insure that everyone does their share of the work each name should have a percentage after it that represents the percentage of the work that the group as a whole felt that each person did. Thus if the people in the group are A, B, C, and D and everyone put about the same amount of work into the project, then everyone would be rated 25%. If however person A put in a lot of effort and person C only did a little bit the numbers might look like A 40%, B 25%, C 10% D 25%. As long as all the numbers are above 10 % this will not effect the grade, but anyone who does less than 10 % will be penalized.

You are being given the project two weeks before it is due, which gives you a long enough period to find a couple of times where you can all meet. One good time and place for this is Fridays in our regular class room at the regular class time.

The Problem: Writing a Solution Manual

Write up a solution book for the following problems. That is you are not only to get the right answers you are to have them written up in such a manner that I could hand them out to students the next time I teach this class. You can use Maple or graphing calculators to do these problems, but say how you used them and why their use was appropriate. Here are problems:

1. Find the point on the curve $y = -x^3 + 2x^2 - x + 5$ that is closest to the point $(1, -4)$.
2. A lighthouse is 8 miles off shore of the beach, and the coastline is straight. Fifteen miles down the coast is a bar. If the lighthouse keeper can row at 2 mph and walk at 4 mph, and he can land anywhere he likes along the coast, how fast can he quench his thirst and relieve his loneliness?
3. The forester problems 21 and 22 on page 137 of the text. (Treat this as one long problem with several parts.)