PreCalculus – Optimization Assignment | Nov 2013

In this assignment, you will work through optimization problems. In each of the questions in this assignment, a function will be generated in order to model a problem in which we are interested in a maximum or minimum point (hence the optimization idea). You will see these types of problems in your next Calculus course, wherein you will use Calculus to determine the maximum/minimum points. For now, most of your analysis will be graphically based.

The questions assigned are from the Holt Pre-Calculus textbook. I have attached a copy of the 4 pages from the textbook. The first three pages are examples, wherein a problem is explained, how the equations were developed is shown & explained to you and then finally, the graphic generation of the answer is presented. Please study these examples, research any other examples or worked solutions and use what you learn to answer several assigned questions from the Holt textbook.

The solutions you present must show the following aspects of a solution:
(A) a labelled diagram/drawing/illustration which should help you to visualize and understand the problem;
(B) an explanation/derivation and/or algebraic work in coming up with the equation that models the problem;
(C) a copy of the graph that you used to answer the question(s) being asked.
The hardest part of any optimization question is part (B) ➔ coming up with the equation. So please study the Holt textbook & look for others on-line.

You are required to complete **3 questions** from page 322 – 325 of Chapter 4 in the HOLT textbook. The questions you can choose from are Questions 4, 5, 6, 7 and 8. *You may work through Question 9 as a bonus question.*

You will have until **Thursday, Dec 5th** to complete this assignment. Present your work neatly, as HOW you communicate your work is also being graded!! Here are 2 links to previously done student assignments ➔ this one scored an A and this second one scored a D. How they were presented was a factor in the final score of the assignment!!!

I have also attached a scoring rubric that I will be using to grade your work.