MTH 1210, FALL 2013
DR. GRAHAM-SQUIRE

SECTION 2.3: IN-CLASS ACTIVITY
INTERPRETING WATER RESERVOIR GRAPH

1. Names

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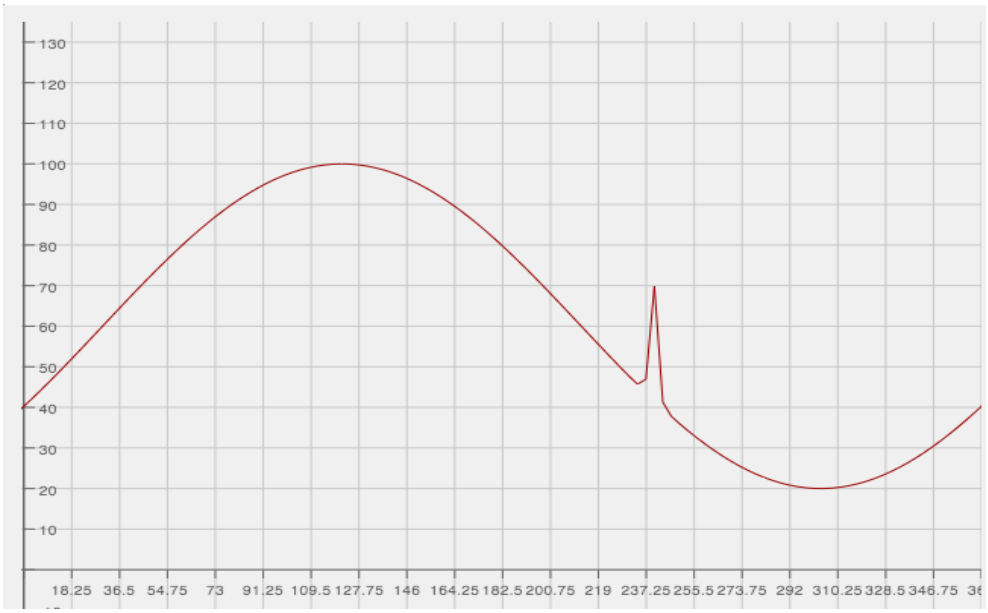
2. Instructions

Read the problem given below, then work on it with the other members of your group. You should give a complete answer with all of your work shown for each question. It is fine for different people to work on different parts of the question, but you should check each other's work since everyone in the group will receive the same grade for the assignment. If you have any questions, ask the other members of your group first. If all of you are stuck, everyone in the group must raise their hand in order to get help from the professor. Attach this as a cover sheet to the work you turn in.

3. Graph of Water Levels

On the next page is a graph representing the water level of a reservoir near New Orleans in the year 2005. The horizontal axis represents days from the beginning of the year, and the vertical axis represents the height of the water in the reservoir (in feet). Use the graph to answer the questions below. It is okay to estimate if you cannot find the exact numbers.



4. Questions

(1) When was the water level increasing? Decreasing?
(2) Find all local minimum and local maximum points on the graph.
(3) Use what you found in parts (a) and (b) to describe what was happening to the water level over the course of the year. Explain why (to the best of your knowledge) we see the ups and downs in the graph. Hint: it may help to remember things that happened in New Orleans in 2005.