Homework 7 - Math 141, Frank Thorne (thornef@mailbox.sc.edu)

Due Friday, October 7

(a) Stewart, Chapter 3 Review (pp. 262-263), 15-40, 57-61, 65-66, 83-84; even required, odd recommended.

(b) Stewart, Ch. 3.9, 11-34; even required, odd recommended. You do not have to follow Stewart's (a)-(e) exactly (although this is a very good idea!) but with these problems especially, you should **explain what you are doing** in complete sentences and **draw a picture** if appropriate.

(c) Define the terms *local maximum*, *local minimum*, *absolute maximum*, *absolute minimum*, and *critical number*.

(d) Describe how to find all the critical numbers of a function.

(e) Describe how to find all the local maxima of a function.

(f) (Trick question. Explain why.) Explain how to find all the absolute maxima of a function.

(g) Stewart, Ch. 4.1, 7-10, 13-14, 21-28, 47-60; even required, odd recommended.