

Homework 8 - Math 141, Frank Thorne (thornef@mailbox.sc.edu)

Due Friday, October 30

- (a) What does the first derivative tell you about the shape of a graph?
- (b) What does the second derivative tell you about the shape of a graph?
- (c) What is an inflection point? How do you find them? Why are they interesting?
- (d) Thomas, Ch. 4.4, 9-18, 31-40 (even required, odd additional); 81-84 (all).
- (e) What is L'Hopital's rule?
- (f) Give an example, other than that given on p. 257, of a situation where the hypotheses of L'Hopital's rule are not satisfied and where it gives the wrong result.
- (g) Thomas, 4.5, 7-14, 51-58, 67-74 (even required, odd additional).