Calculus 1A: Homework Assignments. Notes and Hints.

Revised 1/19/09

Spring 2009, TT 3:30pm - 5:00pm, Room 105 Stanley Hall

Instructor: Professor Zvezdelina Stankova

HW6A. Finish §3.4; read §3.5-3.6. Solve and Write Problems:

(1) §3.4: #38,40,46,50,56(a):
   (a) #38-50: use the chain rule twice.
   (b) #56(a): we are interested in what happens nearby point $(1,1)$, i.e., $a = 1 > 0$, so in your formula for y you can safely drop the absolutely value as $|x| = x$; write a word to that effect so that a reader will know why you did that.

(2) §3.5: #6,10,20,22*,26,29,30,39,46,48,50,54. As usual, you must explain your answers and show all calculations. In #22: proceed as if $g(x) = y(x)$ and differentiate both sides with respect to x, then solve for $g'(x)$; finally, substitute in your formula $x = 0$.

(3) §3.6: #4,6,12,14,24,26,30,32,42,46,48,49. General Note: The only way to get good at applying DLs is to do lots and lots of examples. Thus view this HW as an excellent exercise to help you learn the material, both conceptually and in practice.

HW6B, also due next week, will be posted on the web before the Thursday lecture.