Math 150A, Section 2, Spring 2007
Homework Assignment 5

Name:
Show your work. No work, no credit.

1. If a box with a square base and open top is to have a volume of 4 cubic feet, find the dimensions that require the least material. You should neglect the thickness of the material and waste in construction. Verify that your answer is a minimum.

2. From a rectangular piece of cardboard of dimensions 8×15, four congruent squares are to be cut out, one at each corner. The remaining piece of cardboard is to be folded into an open box. What size squares should be cut out if the volume of the resulting box is to be a maximum?

Pledged
Honor code: I have neither given nor received help on this assignment.