Problem Set 2   **Calculus 3**   **Due 10/16/13**

You are encouraged to work in groups of two to four on this assignment and make a single group submission. Each problem is worth 5 points for correct and clearly justified answers.

1. Use a double integral to find the volume of the solid resulting when a box with rectangular base of length l and width w is cut by a plane in such a way that the resulting vertical edges are of lengths a, b, and c, and the plane cuts off a portion of the base as shown in the image below.
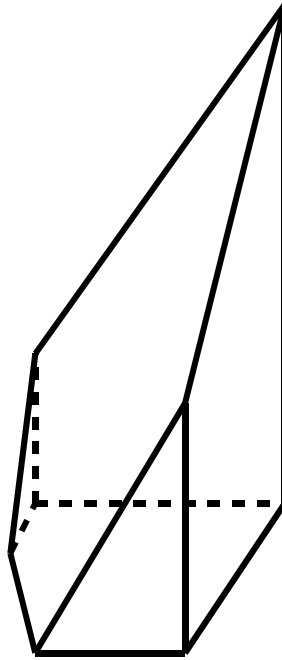
2. Use a double integral to do Exercise #71 in §13.5.