

Math 111.17 Fall 2002

Quiz #8

Name: \_\_\_\_\_

You have 15 minutes to complete this quiz which is worth 15 points. Calculators are permitted, but no other aids are allowed. Show all work neatly and in order, and clearly indicate your final answers. Answers must be justified whenever possible in order to earn full credit.

- 1.** (*15 points*) If  $1200 \text{ cm}^2$  of material is available to make a box with a square base and an open top, find the largest possible volume of the box.