

Group Quiz 7 Calculus III Fall 2015

Names:.....

Solve the following problems. Each problem is worth 5 points.

Q1. Use the method of Lagrange Multipliers to compute the maximum volume possible for a rectangular box **with lid** that is to be made out of $12m^2$ of card board.

Q2. Calculate the double integral

$$I = \iint_D y^2 dA$$

where $D = \{(x, y) : -1 \leq y \leq 1, -y - 2 \leq x \leq y\}$.