

Name \_\_\_\_\_  
Student I.D. \_\_\_\_\_

**Math 1210-1**

**Quiz 9**

**April 15 2016**

Directions: You may ask and answer each others questions on this quiz. The goal is to understand what you're doing and express your thoughts clearly. Write your own solutions though, rather than just copying someone elses. Calculators are not allowed on this quiz. Show your work.

1a) Sketch the triangle bounded by the lines  $y = \frac{1}{2}x$ ,  $y = 2x$ ,  $y = 4$ . Find the coordinates of the three vertices. Compute the triangle area using  $A = \frac{1}{2}bh$ . (Use the "base" on the top of the triangle.)

(4 points)

1b) Use Calculus to recompute the triangle area. You may either use vertical chopping - which will lead to the sum of two "dx" integrals, or horizontal chopping - which will lead to a single "dy" integral. If you correctly do both methods you will receive 4 extra credit points. (Use the back of the page if necessary.)

(6 points)