Retake 11

MAT 201, Spring 2017

Name:

1. (20 points) We will create a right triangle in the first quadrant of the plane. The endpoints of the hypotenuse lie at $(a, 0)$ and $(0, b)$. The other two sides lie on the x- and y-axes. Suppose that the total length of the hypotenuse is fifty units. What is the maximum area that can be enclosed in a right triangle of this type?