

## Homework 5

Sections 8.2

Due: 2-27-15

1. The base of a solid is the region in the  $xy$ -plane bounded by the  $y$ -axis and the lines  $y = 1 - x$ ,  $y = 2x + 5$  and  $x = 3$ . Each cross section perpendicular to the  $x$ -axis is an equilateral triangle. Find the volume of the solid.