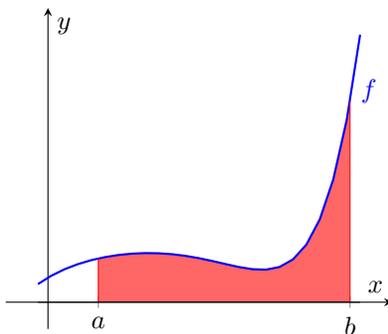


**Instructions.** Show all work, with clear logical steps. No work or hard-to-follow work will lose points.

**Problem 1.** (3 points) Set up an integral that represents the volume of the solid obtained by rotating the following region about the  $x$ -axis.



**Problem 2.** (5 points) Find the volume of the solid obtained by revolving the region bounded by

$$x = \sqrt{9 - y^2}, \quad x = 0$$

about the  $x$ -axis.

**Problem 3.** (2 points) What model of calculator do you use for your homework; is it course-approved? If not, what course-approved calculator will you bring to the exam on Monday?