

# Calculus Quiz

Your Name:

Show all work.

1. Find the volume of the solid whose base is a circle with radius 4 and whose cross sections are equilateral triangles.



2. Find the volume of the solid formed by revolving about the  $x$ -axis the region bounded by:

$$y = x^{3/4}, \quad y = 0, \quad x = 3$$



3. Find the volume of the solid formed by revolving about the  $y$ -axis the region bounded by:

$$y = 5x - 1, \quad x = 0, \quad y = 1, \quad y = 5$$

