

# Calculus Quiz

Your Name:

Given the description, a) Sketch the solid, b) Find its volume. Show all work.

1. region bounded by:

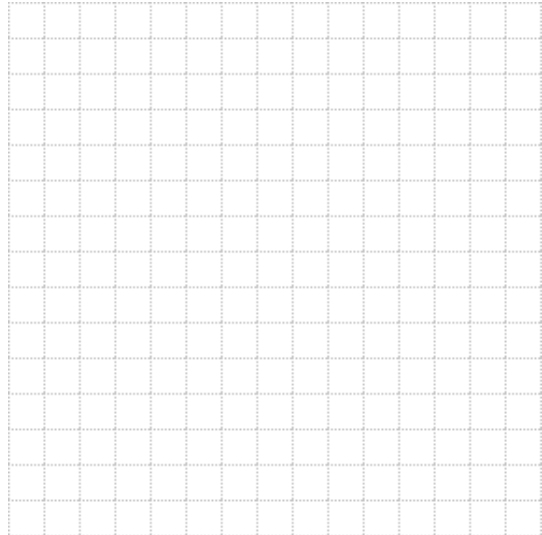
$$y = x^{1/4}$$

$$y = 0$$

$$x = 16$$

revolved about:

$x$ -axis



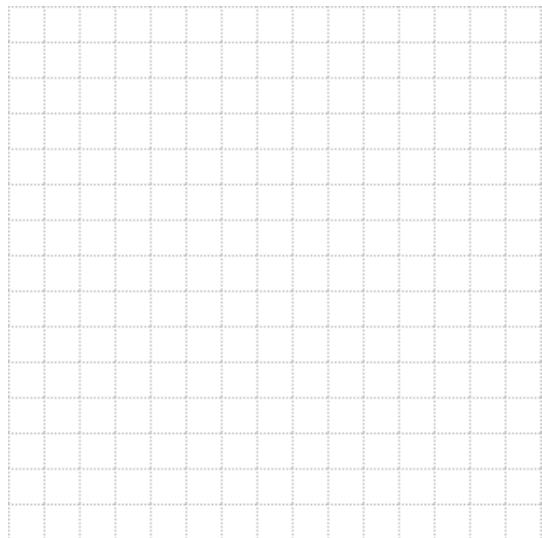
2. region bounded by:

$$y = x^2$$

$$y = x^5$$

revolved about:

$$y = 3$$



over →

3. base of solid is  
region bounded by:

$$y = 2x$$

$$y = -1 \quad x = 2$$

every cross-section  
perpendicular to  
 $y$ -axis is a semicircle  
with diameter  
touching base

