

Name: _____ Section: 201 (starts at 08:00)
202 (starts at 09:35)

Justify your answers.

1. (3 points) Find the area bounded by the curves $y = x^2$, $y = x^3$, $x = 0$, $x = 2$.

Answer: _____

2. (4 points) Find the volume of the solid whose base is an equilateral triangle with side 2, and whose cross-sections perpendicular to a median of the triangle are circles.

Answer: _____

3. (4 points) Find the volume of a solid whose base is a circle of radius 3, and whose cross-sections perpendicular to the base are squares.

Answer: _____