

Name: \_\_\_\_\_ Section: 513 (2:20-3:10)  
514 (3:55-4:45)  
515 (5:30-12:20)

This quiz has 4 questions of equal value. 2 points will be given for a correct answer, 1 for mostly correct work (if shown), 0 otherwise.

1. Find the area between the curve  $y = -(x+4)^2$  and the  $x$ -axis for  $x$  between  $-1$  and  $2$ .

Answer: \_\_\_\_\_

2. Find the area of the region bounded by the curve  $y = (x-3)^2$  and line  $y = x-3$ .

Answer: \_\_\_\_\_

3. Find the area bounded by the curve  $y = \ln(x^2)$ , the  $y$ -axis, and the lines  $y = 2$  and  $y = 6$ .

Answer: \_\_\_\_\_

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

Answer: \_\_\_\_\_