

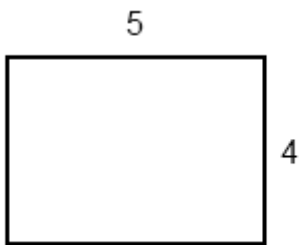
Calculus II
Chapter 7 Test Review

6. Find the area of the surface formed by revolving the graph of $y = 3x$ on the interval $[0, 5]$ about the x -axis.

7. A force of 10 pounds compresses a 20-inch spring a total of 5 inches. how much work is done in compressing the spring 9 inches?

8. Find $M_x, M_y, (\bar{x}, \bar{y})$ for the lamina of uniform density ρ bounded by the graphs of the equations $y = -x^2 + 4, y = 0, x = 0, x = 2$

9. Find the fluid force on the vertical side of the tank, where the dimensions are given in feet. Assume that the tank is full of water and the weight-density of water is 62.4.



10. Sketch the region bounded by the graphs of the equations and determine the area of the region $y = x, y = x^3$