

Problem Set

Section 6.1

Problem 1

Find the area of the region enclosed by the curves $y = x^2 - 2x$ and $y = 2 - x$.

Problem 2

Find the area of the region enclosed by the curves $x = y^2 - 4y$ and $x = 2y - y^2$.

Problem 3

Find the area of the region enclosed by the curves

$$y = \sin 2x \quad \text{and} \quad y = \tan x, \quad -\frac{\pi}{4} \leq x \leq \frac{\pi}{4}.$$

Problem 4

Find the area of the region enclosed by the curves $y = |x|$ and $y = x^2 - 2$.