

Homework Problem H14.A

Given: The shaded area shown lies between a straight line at $x = -2b$ and the function $x^2 = 4by$.

Find: You are asked to find the centroid of this area using integration.

- Carefully define the differential area that you will be using.
- Using this differential area, determine the area, and the x - and y -components for the location of the centroid of the area. Leave your answers in terms of b .

