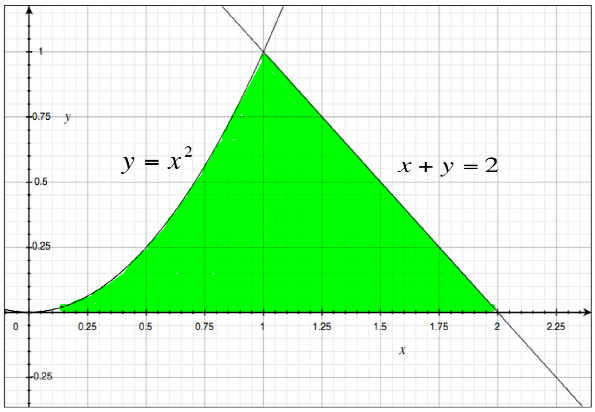
Area in the Plane

Graph

Pg. 400 # 10



Analysis

1. What are the boundaries of the shaded area?

2. Which is easier? Integrating with respect to x or y? How do you know?

3. Do you need to split into subregions? Why or why not?

Symbolic

1. Write an expression for the area of the strips you will be adding up. (If the width is dx, the length must be in terms of x. If the width is dy, the length must be in terms of y).

2. Find the limits of integration. (If using dx, the limits are x values; if using dy, the limits are y values).

3. Integrate to find area!