Refer to Problem 106 in Section 5.6.

1. (1 pt.) Sketch the region.

2. (1 pt.) Choose an axis of integration. Write down your choice.

3. (2 pts.) Sketch a typical rectangle of area. Label its height and width.

4. (3 pts.) Compute the area of this rectangle. Write your answer in terms of the integration variable.

5. (9 pts.) Express the total area as an integral (or a sum of integrals.) If you break up the region you must:

   (a) Repeat step (2) if you choose different axes in different regions.

   (b) Repeat step (3) for each region.

   (c) Repeat step (4) for each region.

6. (4 pts.) Compute the integral(s). Show all work as described in the Type 1 Integration Instructions.