1. §5.6: Problems 53, 47, 55, 57, 59. Show work for each of the following steps.

   (a) Choose an axis of integration. Write down your choice.
   (b) Sketch a typical rectangle of area. Label its height and width.
   (c) Compute the area of this rectangle. Write your answer in terms of the integration variable.
   (d) Express the total area as an integral or a sum of integrals. If you break up the region repeat (b) and (c) as needed.
   (e) Compute the integral(s). (Practice as though this were a graded Type 1 integral.)

   **Remark:** If this were a graded problem each step would be worth approximately (a) 1/10, (b) 2/10, (c) 3/10, (d) 2/10, (e) 2/10. Note that getting the answer is only worth 20%.

2. §5.6: Problems 63, 67, 71, 85, 87. For each problem:

   (a) Sketch a graph of the region.
   (b) Compute the area, showing work for all the steps described above.