Find the area of this region by following the steps below.

1. **Communicate your slicing strategy.** That is,
   - Choose an axis of integration ($x$ or $y$). Write your choice on this worksheet.
   - Determine how many regions you will have to split the problem into.
   - Draw typical slices in each region.
   - Correctly label the height and width of each slice.

2. Write formulas for the area of each slice.

3. Write an integral or a sum of integrals for the total shaded area.