EXTEND ACTIVITY

For this activity, you will create your own region, select a known cross section from geometric shapes, solve your problem and exchange it with a classmate.

1. Create a bounded region. In other words, select an equation or set of equations to serve as the base for your volume problem.

2. Select a known cross section to embed. You might want to use geometric shapes like equilateral triangles, semicircles, squares, rectangles or other shapes with area formulas that are known to most people.

3. You now have a bounded region and a known cross section. Go ahead and set up the integral and solve for yourself.

4. Trade your equation with your neighbor and solve theirs. Check their work once they finish.