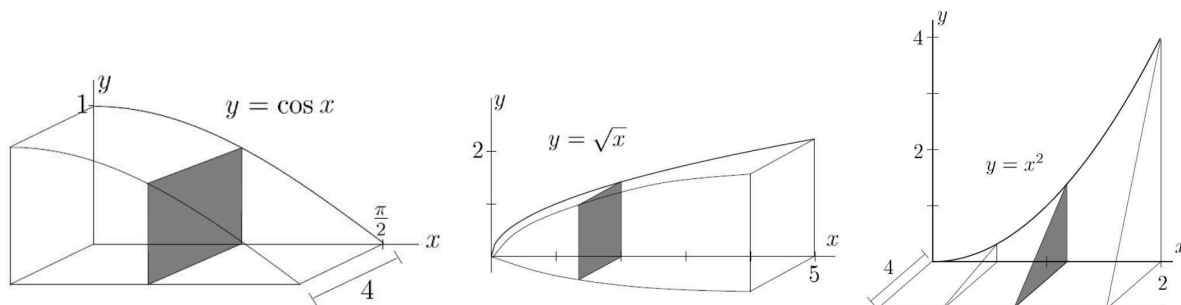


Three shapes from our Math 125 Cross-Sectional Slicing Homework



These three shapes come directly from our Math 125 homework on section 6.2. In that section we study volumes by cross-sectional slicing. Students often refer to this method as the “disk/washer” method, but it refers to any situation where we can find a pattern for the cross-sectional area.

In the 2000’s, the second picture of these three was on a final exam and the problem told students the cross-sections were squares. I sometimes jokingly say that was the easiest hard problem to ever appear on a final exam. Students didn’t do well on it, despite the fact that it is a very short problem and it is a nice computation... try it yourself.

As far as we know, 3D prints of these shapes have never been made until now. We encourage students to come up with other interesting shapes that have basic cross-sections. Then print it yourself or send it our way and we’ll consider adding it to our gallery.