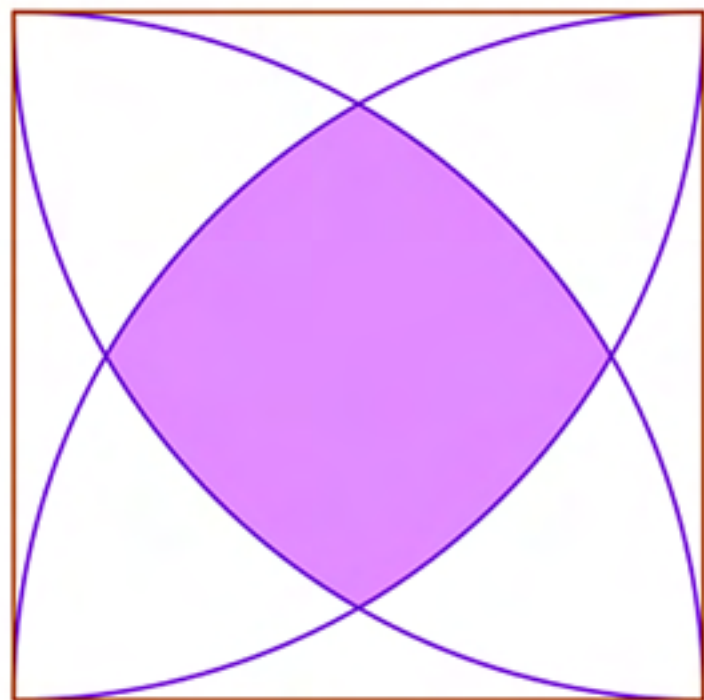# Curved Square

A square of side length 1 has a circle of radius 1 drawn from each of its corners, as in the diagram. The circles intersect inside the square at four points, to create the shaded region.

What is the exact area of the shaded region?