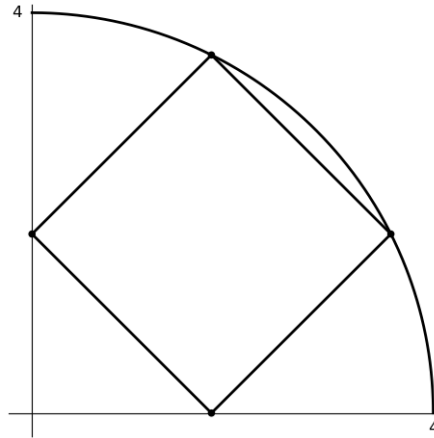


Math Month Challenge 2022

Square Area Puzzle



No sequence of puzzles could ever be considered complete without a nod to circles, squares, and right triangles. For this final puzzle, all you need to do is determine the area of the square shown below, inscribed in the quarter-circle of radius 4:



What is the area of the square? For the record, the vertices of the square do coincide with the axes and graph of the quarter-circle (as shown), and all information necessary for the solution is present in the picture. Good luck!