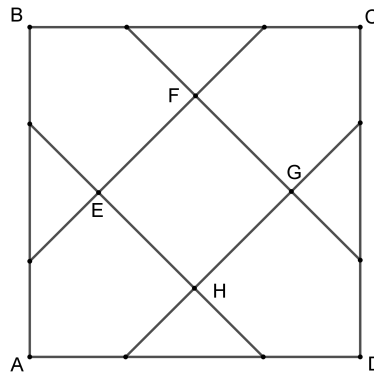




PROBLEM OF THE WEEK #1
(Spring 2022)

The eight segments that form the figure below are all equally long, and the angles formed by their intersections are all exact multiples of 45° . If a point in the square $ABCD$ is chosen at random (uniformly), find the probability that the chosen point lies in the square $EFGH$.



[Please fully explain your answer.]

Email solutions to kwonmi@uwplatt.edu by 2:00pm on Wednesday, February 2, 2022.

Every week, the best solution submitted earns a \$10 Platteville gift certificate; the top scorer each semester also wins a cash award. Good luck!

You can always see the Problem of the Week (and complete rules) online at:

<http://uwpmath.weebly.com/>