Pi Mu Epsilon Problem of the Month
September 2021

In the game of chess, a rook attacks all pieces in its row and in its column. How many ways can one place the four rooks (two black and two white) on an 8 x 8 chessboard so that no two of them attack each other?

Problem of the Month Rules:
- ⌘ Submissions must include a complete mathematical justification along with the answer.
- ⌘ Submissions may only be made by individuals or groups of two and must be dated.
- ⌘ Due date: Sept 30, 2021 before 5 p.m. to Drs. Poplin, Shoenthal, Ledford, Hoehner.