

MORE WITHOUT WORDS

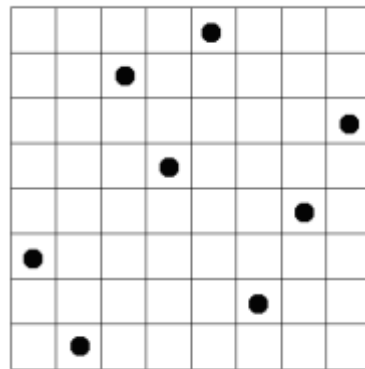
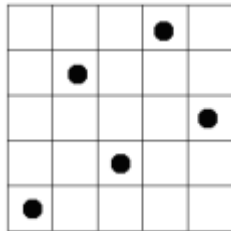
Mathematical Puzzles to Confound and Delight



MWW 17: SOLUTION

This is a famous puzzle in mathematics. Is it possible to place N queens on an $N \times N$ grid of squares so that no two queens lie in the same row, column, or diagonal (that is, so that the queens are in mutual non-attack)?

The answer is always yes!



There are multiple solutions and it is a challenge to count how many different solutions are possible for each sized board. Search “Queens Problem” on the internet to learn much more about this work.

Question: Is it ever possible to place $N + 1$ queens on an $N \times N$ grid of squares in mutual non-attack?