

POSTLAB:

1. What is the relationship between tic-tac-toe and magic square?

If you consider a 3x3 magic square, where each cell holds a number such that all rows, columns, and diagonals add up to the same magic number (usually 15), you can overlay a tic-tac-toe grid on top. Interestingly, a winning move in tic-tac-toe often corresponds to filling in squares that sum up to the magic number.

2. What is a magic square of order n?

A magic square of order n is an n x n grid where each cell contains a different positive integer from 1 to n^2 , and the sum of the numbers in each row, column, and diagonal is the same, known as the magic constant. This constant can be calculated as:

Magic constant = $n * (n^2 + 1) / 2$

So, for a 3x3 magic square, the magic constant is 15