

Q.1]

→

There is a relationship b/w Tic Tac Toe & magic square particularly in context of 3×3 magic square. In Tic Tac Toe, players aim to create a line of three of symbols (X or O) in row, column or diagonal. A 3×3 magic square is a mathematical construct where the sum of no in each row, column & both main diagonals is same. In 3×3 magic square, the no are usually distinct integers arranged in a grid. Both Tic Tac Toe & 3×3 magic square involve arranging symbols or no. in way that satisfies specific criteria for winning.

Q.2]

→

A magic square of order n is arrangement of no from 1 to n^2 in square grid of size $n \times n$ such that sum of no in each row, each column & both main diagonals is same. This constant sum is known as "magic content". This most well known & studied magic square is of order 3 (3×3), where sum of each row, column & diagonal is 15 . Magic sq. exists for various orders but constructing them becomes increasingly challenging as order increases.