Tic Tac Toe Strategy
2002? 2003?

Tic Tac Toe Board:

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1 | 2 | 3
4 | 5 | 6
7 | 8 | 9
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If O begins first:
1) If O goes on squares 1, 3, 7, 9:
   --X should go in square 5
   --if O has two in a row, X goes on the third square to block and ties
   --if O goes on the opposite corner from the first move (like 1 from 9), X can go anywhere except in a corner
   --if O goes in a center square where it doesn't have two in a row (like 8 or 6 if it originally chose square 1), X should get two in a row, which will result in a tie
2) If O goes on 2, 4, 6, 8:
   --X can go in square 5
   --after O goes, X should get two in a row (if it isn’t blocking O) and force a tie
3) Of O goes on 5:
   --X can go on 1, 3, 7, 9 to end with a tie (not on 2, 4, 6, 8)

If X begins first:
1) X should go in a corner (1, 3, 7, 9)
   a) If O goes on 2, 4, 6, 8:
      --X should go on 5,
      --O must go in the third square to prevent X from 3 in a row
      --X goes in a corner and wins
      --Example: X-1, O-4, X-5, O-9, X-3, O-2, X-7
   b) If O goes on 9:
      --X goes on 7 or 3
      --O must go on 4 or 2
      --X goes on the last corner and wins
   c) If O goes on 3, 7:
      1) X can go on 9
         --O must go on 5
         --X goes in last corner and wins
      2) X can go on 4 (if O is on 3) or 2 (if O is on 7)
         --O must go on 7 or 3, respectively
         --X goes on 5 and wins
      3) X can go on 3 if O is on 7 or 7 if O is on 3
         --O must go on 2 or 4

\(^\text{\dagger}\) This strategy for either winning or tying in a tic tac toe game every time was developed and written by Brian Tomasik during 10th grade.
--X goes on 9 and **wins**

d) If O goes on **5**:
   --X can’t always win but should go on 9
   --if O goes on 3 or 7, X can go in the last corner and win
   --if O goes on 2, 4, 6, 8, it will be **a tie**