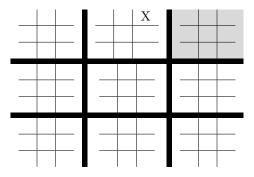
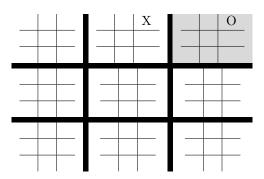
## Tic-Tac-Toeception Dr. Vince

- 1. Just like regular tic-tac-toe, there is an X player and an O player, who take turns.
- 2. The small  $3 \times 3$  board is called a <u>local board</u>, and the large  $3 \times 3$  board is called a global board.
- 3. X plays in any of the 81 squares.
- 4. O must then play in the local board whose position in the global board corresponds to the relative position in the local board that X played in. For example, if X played in the middle square of his local board, then O must play in the middle local board. If X played in the top right square of his local board, then O must play in the top right local board.



O must play in the top right local board.

5. Similarly, the relative position of where O plays will determine which local board X may use. Continuing our example from above, if O plays in the top right corner of their local board, X must use the top right local board.



X must play in the top right local board.

- 6. If a move is played such that the local board is won by the rules of normal tic-tac-toe, that player places their mark over the entire local board, as if they had played their mark on the global board.
- 7. If a local board results in a tie, no mark is placed on top of the board.
- 8. If a player is sent to play in a local board with no moves available (because there was a win or a draw), then that player may play in any local board.
- 9. The game ends either when a player wins the global board (by getting three of their mark in a row), or there are no moves remaining (which is a tie).

