$\exists(i, j : \mathbb{N} \mid 0 \leq i < SIZE \wedge 0 \leq j < SIZE :$
$\quad \text{checkHoriz}(i, j) \vee \text{checkVert}(i, j) \vee \text{checkDiag}(i, j))$

local functions
checkHoriz: $\mathbb{N} \times \mathbb{N} \to \mathbb{B}$
checkHoriz$(i, j) \equiv ($
$\quad i + 2 \geq SIZE \Rightarrow \text{false} \mid$
$\quad \text{true} \Rightarrow board[i][j] = board[i + 1][j] \wedge board[i][j] = board[i + 2][j]$
)

checkVert: $\mathbb{N} \times \mathbb{N} \to \mathbb{B}$
checkVert$(i, j) \equiv ($
$\quad j + 2 \geq SIZE \Rightarrow \text{false} \mid$
$\quad \text{true} \Rightarrow board[i][j] = board[i][j + 1] \wedge board[i][j] = board[i][j + 2]$
)

checkDiag: $\mathbb{N} \times \mathbb{N} \to \mathbb{B}$
checkDiag$(i, j) \equiv ($
$\quad i + 2 \geq SIZE \Rightarrow \text{false} \mid$
$\quad j + 2 \geq SIZE \Rightarrow \text{false} \mid$
$\quad \text{true} \Rightarrow board[i][j] = board[i + 1][j + 1] \wedge board[i][j] = board[i + 2][j + 2]$
)