

Topic: Searching Problem Formulation

1. (a) Assuming the grid is $n \times m$, we have $4 \times n \times m$ unique states in our space.
 (b) I don't see how this affects the upper-bound for our state space size. If we assume each corridor is one square in length and has 4 directions to choose from, it is the same size. We could say that we don't want to turn around, which would reduce it to $3 \times n \times m$. I am probably misinterpreting this problem.
2. To reduce the number of states, I only included valid steps. The correct path is clearly shown.

(a)

