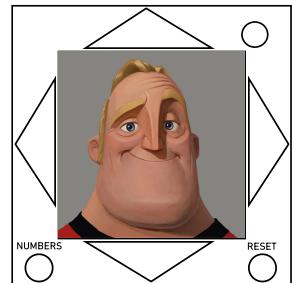


## On the Subject of Canny Maze

The thing that gets me about these modules is that the instructions are actually well-written, even though we only see images and text. We create the whole solution in our text-editing software, and it turns out correct.

On this module is an image of Mr. Incredible becoming canny alongside four arrows and two red buttons. These images (tiles) are numbered 1-7 in order of the table below, and are randomly distributed across a square grid (maze) with dimensions ranging from 5 to 8.



Clicking on the center of the module reveals the entire maze, and clicking again returns to the view of the current position. In the view of the entire maze, the current position is surrounded by a blue border and the goal by a red border. Additionally, there will be text in the top left corner giving letter-number coordinates of the current position and the goal.

The button on the bottom right completely resets all progress, but does not regenerate the maze. The button on the bottom left turns all of the images into numbers when viewing the entire maze to make communication easier. As with the maze view, the blue number represents the current position and the red number represents the goal.

Whichever tile is on the module at first is the type of maze present, and the type will never change. Upon reaching the goal, the module will automatically solve.

In the case that the maze takes more than ten seconds to generate (starting from the bomb creation), it will activate a failsafe in which it can be automatically solved by pressing either the NUMBERS or RESET buttons.



## Instructions

**Tiles Maze:** Take (the total number of tiles traversed multiplied by the current tile) modulo 7 and add 1. Whichever surrounding tile is closest or equal to this number is the tile to navigate to. Do not consider tiles that have already been traversed when determining the closest to the result. Note that the total number of tiles traversed includes the starting tile, and begins at 1.

**Sum Maze:** Sum all orthogonally adjacent tiles, then modulo 7 and add 1. Whichever surrounding tile is closest or equal to this number is the tile to navigate to. Include the tiles that have already been traversed in the sum, but do not consider them when determining the closest to the result.

**Compare Maze:** Compare the sum of the tiles immediately to the left and right with that of the tiles immediately above and below. The defuser can only move in the directions of whichever pair is larger. In the case of them being equal, the defuser can move in any direction.

**Binary Maze:** Take the binary representation of the current tile. Whichever tile can be reached by inverting any one bit is the tile to navigate to.

**Avoid Maze:** Cannot move up to tiles 1 or 2, cannot move right to tiles 3 or 4, cannot move down to tiles 5 or 6, cannot move left to tile 7.

**Strict Maze:** Can only move up or down if moving from an odd tile to an even tile or vice versa, can only move right if moving to a higher tile, can only move left if moving to a lower tile.

**Walls Maze:** Must avoid walls (see below page).

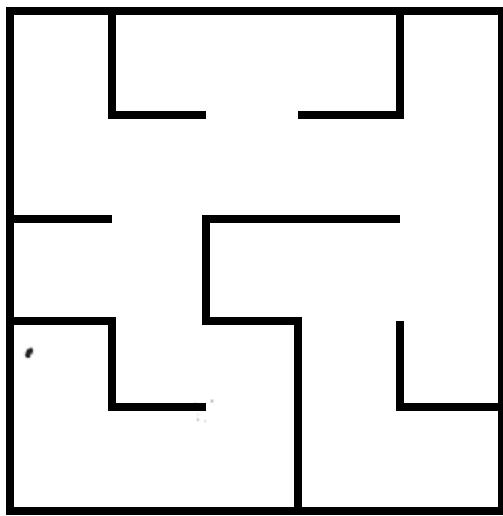
**Backtracking is almost always allowed:** In all mazes except Walls Maze, it's guaranteed that the defuser can go back to a tile on which they've already traversed. This is not allowed in Walls Maze since it would sometimes allow for passing through walls.

In the case of more than one tile meeting the necessary conditions, any applicable tile can be navigated to. This also applies while backtracking.

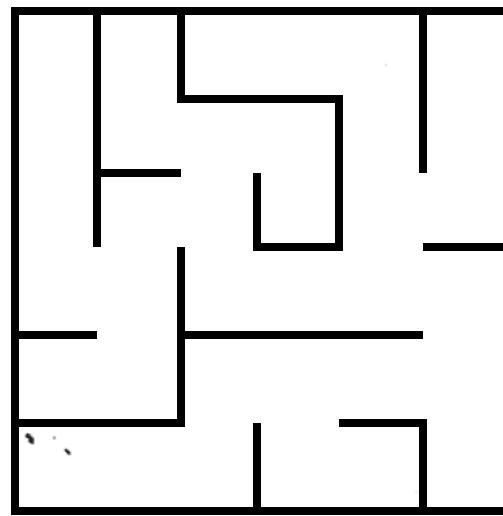
**Not a bug, but a feature:** If stuck in Tiles Maze or Sum Maze, try going in one direction, then going back so that a different tile is able to be traversed.

Walls Maze Maps

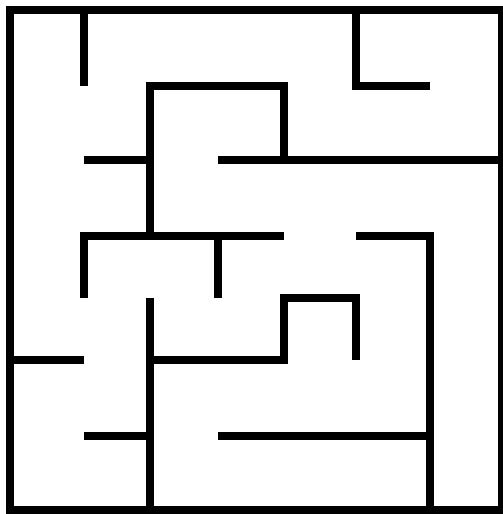
5x5



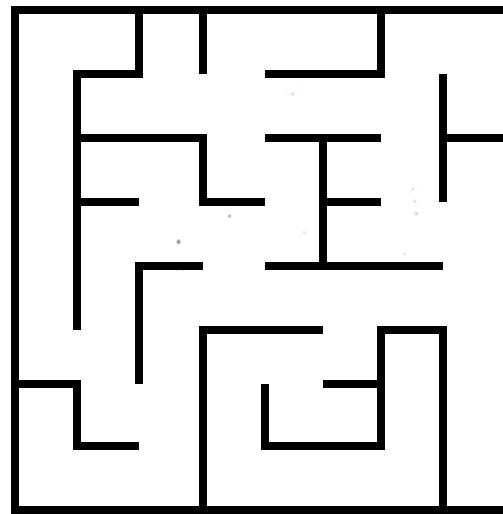
6x6



7x7



8x8

Binary Maze Guide

- 1: 3, 5
- 2: 3, 6
- 3: 1, 2, 7
- 4: 5, 6
- 5: 1, 4, 7
- 6: 2, 4, 7
- 7: 3, 5, 6