

TRUE FALSE

1. In all area coverage applications, the robot must physically visit all points in the arena.

2. What makes the exploration algorithm (described in the handouts) finite?

- A. The fact that the arena has limited size
- B. The minimum distance requirement between the nodes
- C. The non-zero speed of the robot

TRUE FALSE

3. In grid-based navigation methods, all grid cells must have the same shape.

1. This is false. In sensory area coverage (for example in connection with mapping), it is sufficient that the robot's long-range sensor(s) (e.g. LRFs) cover all parts of the arena.
2. The correct answer is B. Without a limit on the node placement, the robot could keep going around the arena indefinitely!
3. This is false. The cells can have different shape, but should be convex, so that the robot can move freely within a cell.