## AI Planning for Autonomy

## Solution Problem Set III: Choosing Heuristics

1. x and y are coordinates, and v are the coordinates that remain to be visited. The rest of the questions are discussion questions for class or on LMS forum.

2.

```
F=\{ at(x,y), visited(x,y) \mid x,y \in \{0,\ldots,m-1\} \}, A=\{ move(x,y,x',y'): \bullet \ Prec: \ at(x,y) \bullet \ Add: \ at(x',y'), \ visited(x',y') \bullet \ Del: \ at(x,y)
```

```
 \mid \text{for each adjacent } (x,y) \ (x',y'), \text{ and } (x',y') \notin W \ \}   I = \{at(0,0)\}   F = \{visited(x,y) \mid (x,y) \in V\}
```