Midterm Review Topics
CSCI 450 – AI
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1. Expect the following APPROXIMATE points breakdown:
   35-45 pts Lisp, 50-60 pts Search, 10-15 pts Features and Constraints
2. Introductory lectures
   a. Definitions of AI
   b. Turing test/Chinese Room
   c. Dimensions of complexity
   d. Representation
3. Lisp
   a. Be able to interpret functions
   b. Be able to write functions
4. Search
   a. Blind vs informed/heuristic
   b. Breadth-first
   c. Depth-first
   d. Depth-first fixed depth
   e. Iterative deepening
   f. Uniform Cost Search
   g. A*
   h. Best-first
   i. RBFS
   j. Minimax
   k. Alpha-beta pruning
   l. Heuristics/evaluation
   m. Be able to explain pros and cons of different methods
   n. Know the individual algorithms and how they work
   o. Definitions: admissible, complete, optimal, etc.
   p. Problem formation (state space representation)
5. Features and Constraints
   a. Definitions: worlds, models, hard vs soft constraints, domain consistent, arc consistent, constraint networks, etc.
   b. Constraint Satisfaction as search
   c. Generalized arc consistency algorithm
   d. Domain splitting