Knowledge Questions

Expect knowledge questions like I ask in the homeworks and entry/exit surveys for ALL the materials we covered in the classes (see class notes). If you have doubts about answering the questions BEFORE the midterm, post them on Piazza and I will try to answer them.

Detailed Questions that Require Working Knowledge

You should study the following topics deeper to be able to solve small problems:

1. Tree/Graph Search Algorithms
2. Probability, Bayes Nets, Maximum Likelihood and Expectation Maximization (EM)
3. Supervised Learning: Perceptron, Linear Regression
4. Unsupervised Learning: k-Means Clustering, Using EM for Gaussian Clustering
5. Propositional Logic, Truth Tables, and Inference
6. Planning: Action Schemas
7. Planning under Uncertainty: Markov Decision Processes (MDPs), Value Iteration, Reinforcement Learning

Good luck in your preparations.
-Cengiz Gunay, Ph.D.