Knowledge-Based AI Review

Artificial Intelligence

1. In the context of propositional logic, define sentence.

2. In the context of propositional logic, define knowledge base.

3. In the context of propositional logic, define axiom.

4. In the context of propositional logic, define inference.

5. Define grounding.

6. Define entailment.

7. In the context of logical reasoning, define model.

8. In the context of logical reasoning, define model checking.

9. List two methods of establishing the truth of a logical sentence.

10. Define satisfiability.

11. How does logical theorem proving work?

12. Translate the following English sentence into first-order logic: "All that glitter is not gold."

13. Translate the following English sentence into first-order logic: "There's someone for everyone."

14. Express the following Engilsh sentence in a formal ontological knowledge representation language: "A hot dog is a sandwich."