TDBB08 Logic with Applications Spring 1998b

Exercises for the group exercise session on March 27, 1998.

Note: There may not be time to do all of these exercises in the time allotted. If there is one which gives you particular difficulty, come prepared to ask about it.

1. Suppose that the blocks world of the introductory slides is extended to have three cubes and three pyramids, with the same stacking assumptions. Compute the number of distinct possible worlds in this configuration.

2. Convert the formulas of Exercise 1 on page 25 of the text which involve $\rightarrow$ to ones involving only the connectives $\wedge$, $\vee$, and $\neg$.

3. Do Exercise 2 on page 25 of the text. Also indicate which of the formulas are satisfiable.

4. Do Exercise 3 on page 25 of the text.

5. Give well-formed formulas which represent Figures 1.36, 1.37, and 1.38 on pages 23-24 of the text.

6. Do exercise 1.11 on pages 23-24 of the text.