1. Exercise #10 on p. 95 of IML.

2. What does this mean: $\diamondsuit p$? Assume there are three possible worlds, $\{w_1, w_2, w_3\}$. What truth values and access relationships are minimally necessary for this to be true?

3. What is the difference between $\Diamond \Box p$ and $\Box \Diamond p$? What is the simplest possible configuration of worlds, values, and access where they have distinct truth values?

4. How would you do the semantics for a combined modal and temporal logic? Explain with respect to a configuration of worlds where you can distinguish $P \Diamond p$ and $\Diamond Pp$.

**Things to remember:**

1. This is due by the *beginning* of class on Mar. 10!

2. Type it, double-spaced.

3. This can be no more than *two* double-spaced pages.

4. Keep in mind that there may be funny symbols here that you’ve never used or printed before. Leave time to make sure you have them right.

5. Remember: nothing late. Do not wait until the last minute to do this or to print it out.

6. You may certainly talk to each other about this and other assignments, but everyone must turn in their own work.