

1. *Assignment 7*
 - a. Read Tarski [1946] 1995, chapter 3. In particular, be prepared to discuss its exercises 1–3, 8, 10–12.
 - b. Read the *Cardinals I* unit. This material will be discussed in class meetings 7, 8. Locate and read related material in Stoll [1963] 1979.
 - c. Find and be prepared to discuss informally proofs of its propositions 1–7.
 - d. We should apportion among the class responsibility for finding and discussing proofs for propositions 9–15, 18–19, 24–26, 30, 32, 34–36.
2. *In class*
 - a. I collected solutions to substantial problem 1 in the *Partially ordered sets* notes.
 - b. I finished responding to questions about the *Partially Ordered Sets* unit.
 - i. But I forgot routine exercise 2. I'll try to remember, next meeting.
 - c. I discussed *assignment 5, substantial problem 4*. You need to prove
 - i. $\leq$ is reflexive and transitive,
 - ii. each φ_g is injective and surjective,
 - iii. $x \leq y \Rightarrow \varphi_g(x) \leq \varphi_g(y)$,
 - iv. $\varphi_{g \circ h} = \varphi_g \circ \varphi_h$.
 - d. I respond to questions about Tarski [1946] 1995, chapter 2, through section 11, particularly about its exercises 3, 4, 6, 7, 9, 10.
 - i. Kraus 1968 is a really nice justification of the truth-table for material implication.
 - ii. Several remarked that you haven't yet started reading Tarski. That's too bad. The intent is to use Tarski to refresh your ken of the language and elementary ideas used in lower-level courses in this kind of mathematics. Some of you are having major problems with that language in the homework assignments. Tarski wrote concisely in plain language. His writing is very precise, just as a software designer's must be, and rarely more sophisticated than necessary. I think he spent most of his effort deciding what *not* to dwell on. Don't read into his work complexities that he is avoiding. I don't know any better way to help with this problem.
 - e. We started discussing the *Complete Lattices* unit, particularly its routine exercise 2.