

**Midterm Exam:** Monday, November 6, in class.

**Reading:** Nothing new this week. Reread all the reading assignments so far.

**Reading Report:** None this week.

**Written Problems:** *These do not have to be handed in – they are only for your practice.* All are from Venema.

- Venema, pp. 50–51, Exercises 4.1, 4.4, 4.5, 4.11, 4.12.
- Which statements are true for all sets  $A$  and  $B$ ?
  1.  $A \subseteq A$ .
  2.  $A \subseteq (A \cap B)$ .
  3.  $A \subseteq (A \cup B)$ .
  4.  $(B - A) \subseteq A$ .
  5.  $(B - A) \subseteq B$ .
  6.  $\emptyset \in A$ .
  7.  $\emptyset \subseteq A$ .
  8.  $A \cup B = B \implies A \subseteq B$ .