

EXERCISES FOR WEEK 01

1. Work problem 8 from Cunningham, Exercises 1.2 (p.13), and problem 8 from Exercises 1.5 (p. 26).
2. Work problems 1–3, 7–8, 9a, 11, 12bd from Cunningham, Exercises 1.1 (p.5).
3. Suppose A , B and C are sets such that $A \subset B \subset C \subset A$. Prove that $A = B = C$.
4. Suppose A , B and C are sets such that A is contained in B and B is contained in C such that either of the two containments is proper. Prove that A is properly contained in C . (There are two cases!)