(1) Chapter 4, Exercises, 14.
(2) Chapter 4, Exercises, 18.
(3) Chapter 4, Exercises, 19.
(4) Chapter 4, Major Exercises, 5.
(5) Chapter 4, Major Exercises, 7 (you may assume Lemma 1 and Lemma 2 from the Major Exercises 5 and 6).