## **HOMEWORK #9**

**Problem 1.** Given an example of a plane graph G whose dual  $G^*$  is isomorphic to a *proper* subgraph of G.

**Problem 2.** Find a plane graph with 9 vertices that is isomorphic to its dual. (Look at the exercises in the book for ideas.)

**Problem 3.** Problem 7.1.3 (page 235).

Problem 4. Problem 7.2.3, page 245.

**Problem 5.** Problem 7.2.9, page 246. (You don't need to use induction.