

Homework 8, Due Monday, March 4, 2013

**Problem 1 (10 points):**

Chapter 7, Page 415, Problem 1.

**Problem 2 (10 points):**

Chapter 7, Page 415, Problem 2.

**Problem 3 (10 points):**

Chapter 7, Page 415, Problem 3.

**Problem 4 (10 points):**

Chapter 7, Page 416, Problem 5.

**Problem 5 (10 points):**

Chapter 7, Page 419, Problem 11. [Hint, it's false. Show that for any  $K$ , there is a graph that has a maximum flow of  $K$ , while the Forward-Edge-Only algorithm (with a badly chosen path) results in a flow of 1.]

**Problem 6 (10 points):**

Chapter 7, Page 421, Problem 14 a. [Don't worry about runtime - they are asking you to show how to use Network Flow to solve the problem.]