

## Homework Assignment 9

Due Date: Friday, 7th of November, 2008

1. Determine all of the winning coalitions for the weighted voting system

$$[30 : 20, 7, 6, 5, 1]$$

2. The winning coalitions (of unnamed weighted voting systems) are given below. Determine whether each voter is a dictator, a dummy voter, has veto power, or none of these.

(a) AB, ACD, ABC, ABD, ABCD

(b) A, AB, AC, ABC

(c) AB, ABC, ABD, ABCD

3. For each of the weighted voting systems below, determine whether each voter is a dictator, a dummy voter, has veto power, or none of these.

(a) [15 : 16, 3, 2]

(b) [13 : 9, 4, 3, 1]

(c) [14 : 9, 5, 3, 1]

4. A weighted voting system with 4 voters has the following winning coalitions:

$$AB, ABC, ABD, ACD, ABCD.$$

If the quota is 11, determine weights for the 4 voters. (There is more than 1 possible answer.)

5. Chapter 11 (page 425): 5, 7, 8.