Quiz 8
Friday, April 13th.

NAME ————————————————————————————————————

1. Given the weighted voting system [4:1,2,3], list all winning coalitions and all minimal winning coalitions.

2. A weighted voting system has 6 members. How many distinct coalitions are there in which exactly two voters vote yes?

3. A sorority has an executive board consisting of a chair, a vice chair, and three other members. Its voting rules indicate that an issue can pass in two ways: if the chair, vice chair and one other member support the issue, or if one of the chair or vice chair and two other members support the issue. Find a weighted voting system that is equivalent to this.

4.(a) Calculate the Banzhaf power index for the weighted voting system [9:8,4,2,1], and the Shapley-Shubik power index of voter A and D.
(b) Is there a dictator in this system? A voter with veto power? A dummy voter?