

17.251/252

Problem set # 2

November 17, 2008

Due: November 24, 2008, 11:59pm

(May be dropped off at the McCormick Hall Desk. Please keep a photocopy, in case it gets misplaced.)

One piece of advice is to photocopy everything you do. You will find that having photocopies will be helpful, especially in the multi-part questions. You may want to reduce the size of the copies, since you may find that you go off the page with some of these answers.

In addition, you should try to be reasonably precise in drawing the pictures to illustrate your answers. Using graph paper and a compass would be helpful. Another option is to use a drawing program (the drawing program in PowerPoint is amazingly adaptable to illustrating answers to these questions.

1. The following are the ideal points of a three member legislature considering how much money to spend on bailing out the auto industry (dimension 1) and the financial service industry (dimension 2):

Member	Auto	Financial services
A	\$20b	\$20b
B	\$40b	\$60b
C	\$30b	\$70b

The status quo is (0,0).

a. Draw a picture that depicts the ideal points, the status quo, and the win set against the status quo. (Note that the win set will go into a region that is negative in dollars. Don't worry about that.)

b. Show the region in which the three legislators can *unanimously* agree to move policy from the status quo.

2. There's an election that affects the legislature described in Question 1. Member C is replaced with a new member, D, whose ideal point is \$10b for the auto industry and \$70b for financial services. The status quo is still at (0,0). How does that change . . .

a. the majority-vote win set

b. the region of unanimous agreement.

Draw pictures to illustrate your answers.

3. Attached to this sheet is a set of ideal points (C_1, C_2, C_3) and a status quo, ϕ .
 - a. Show that the point z is not in the win set against ϕ .
 - b. Construct a voting agenda that moves from ϕ to z through a series of majority votes. Label each step in the voting sequence. Motion 1 is labeled M_1 , etc. Next to each labeled motion, indicate which members vote in favor of the motion.
4. Do questions 9 and 10 on pp. 51–52 in *Analyzing Congress*.

