1. In your groups, discuss each system that each member created.
2. Select one system that you, as a group, believe meets all of the requirements (page 1 of the first handout). You will later present this numeration system to the class.
3. Look at the numeration system your group has selected. For each of the following questions, be sure that you can check it off.

Yes

**Question 1**: Does your number system allow you to write any

number you can think of?

Yes

**Question 2**: Does each value have a unique representation in

your number system?

Yes

**Question 3**: Are you only using 5 symbols?

Yes

**Question 4**: Are the numbers reasonable in length when your are

writing them down? (Will they remain reasonable in length for

large values?)

Yes

**Question 5**: Are you making sure that you do not have exactly 10

options that are just “renamed” digits 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0?

(This will ensure that you do not simply “reinvent” our existing base

10 number system.)

**Question 6**: Can everyone in your group explain your number system

Yes

to a stranger?

* If you answered yes to each of the above questions, then begin to think about how you would add numbers in your system. **Please ask me for the third handout.**
* If you did not answer yes to each of the above questions, you will need to reevaluate how you’ve chosen to use your symbols. Find an alternative that will fulfill all of the above criteria. Fill in the table again with your alternative system and discuss it with your group. You may ask me questions too. *You should not leave class today without obtaining the Third Handout.*

Homework: On Monday October 3, 2011 your group will present your number system to the entire class. You will need to explain your symbols and how your numeration system works. Please bring poster board and other utensils to creatively display your number system no later than Wednesday September 28, 2011. You should also work on the Third Handout.