

## BSI Activity Form

Name of Activity:       What drinks should we sell?  
                          This activity can be done as an introduction to graphing linear inequalities.

Class:                    Math 46

Topic(s):                Graphing Linear Inequalities, Creating Linear Expressions and Linear Equations  
(and the difference between the two)

Prerequisite Skills:       Graphing Lines

Materials Needed:       Scientific Calculators (Or, Graphing Calculators)  
                              Rulers  
                              Graph Paper

Time:                    45-60 minutes

Grouping Description:    Groups of 3 or 4 (Random or teacher selected are best.)

Deliverables: (What will students produce?)

Students will complete the activity questions that walk them through the procedure. In doing so, they will answer short answer questions, draw a graph showing two lines and a final shaded region. They will also turn in a write up described at the top of the activity

Activity Implementation:

Split students into groups of 3 or 4.

There are multiple versions of the activity sheet. Most groups should get a different version.

Students work in their groups.

The instructor should monitor progress and keep students on task.

This is a very student directed activity. They should be encouraged to discuss and debate their answers with each other. (If a group seems too quiet, you might want to ask them what were there answers and how did they come to their answers and why they think that they are true.)

If time allows, have pairs of groups share with each other what happened in their groups and what their final analysis is.

The final write up can be done electronically and either e-mailed or posted through Blackboard (to encourage pictures.)