

HOMework 1  
SA305, SPRING 2012  
INSTRUCTOR: PHILLIPS

**Due: Friday, 1/20, at the beginning of class.** Hand in the following:

1. Write the formulation on p. 7. Be sure to describe the variables used. Solve this problem via the graphical approach we discussed in class. In particular, sketch the feasible region and identify the optimal “corner point”. Show that the corner point is optimal by sketching the gradient at that point and showing there are no improving directions that are feasible.
2. **Formulate only** an LP to model the problem described in Exercise 2.1. **Do not solve!**