

WRITTEN ASSIGNMENT # 1

MATH 16

The purpose of this assignment is to help you in reading your book. The questions asked will be the main concepts that I expect you to know by the next class period.

Read Chapter 1.

1. In Example 1.1 in Chapter 1, what is the expression we want to maximize? Explain what all the symbols in this expression mean.
2. What are the constraints in Example 1.1 in Chapter 1? Explain what all the symbols mean.
3. What is the basic assumption in Example 1.1 in Chapter 1?
4. In Example 1.2 we seek to minimize the "lost opportunity cost", give a mathematical expression for this cost and make sure that you explain what all the symbols in the expression mean.
5. What are the constraints in Example 1.2? Explain what the symbols in your expression mean.
6. What is the assumption in Example 1.2?
7. What is the *standard form* of a LP problem? What do the letters in the problem stand for, i.e. x_i 's, b_j 's, etc.?
8. What do I mean when I say that a solution to an LP problem is "feasible"?
9. Give an example of an infeasible LP problem.
10. Give an example of an unbounded LP problem.