

MATH 104/184: Week 9 Learning Goals

November 2, 2012

Learning Goals

There is a midterm in Week 9.

We will start to work with Optimization Problems in section 4.4 of Briggs Cochran in Week 9. There will be some extra business related optimization problems posted as well.

Some of you may be finishing up the learning goals from Week 8 in Week 9. This is fine as one week will be enough for Optimization Problems, if need be.

The specific learning goals for this section are that by the end of Week 10 and review homework, students should be able to:

1. interpret the idea of optimization as the procedure used to make a system or a design as effective or functional as possible, and translate it into a mathematical procedure for finding the maximum/minimum of a function;
2. set up an optimization problem by identifying the *objective function* and all appropriate *constraints*; and
3. use calculus to solve optimization problems, and explain how they used the constraints in the solution process.

Suggested Problems and Assignments

Suggested Problems: This week, all suggested problems from the text are:

Chapter 4.4: 2, 3, 4, 8, 11, 13, 15, 16, 20, 23, 25, 31, 33, 48, 55, 57.

There will be a handful of extra problems posted on the website.