

## Math 495R Homework 5

In the first few parts of this lab you will program certain basic vector operations. For the purposes of this and subsequent labs, we will represent a column vector by an array of numbers. In each problem, your program must allow for vectors of any size. However, if the program takes two vectors you may assume they have the same size.

- (1) Write a function that multiplies a given vector by a given scalar.
- (2) Write a function that adds two given vectors together.
- (3) Write a function that computes the dot-product between two given vectors.
- (4) Project Euler, Problem 2.