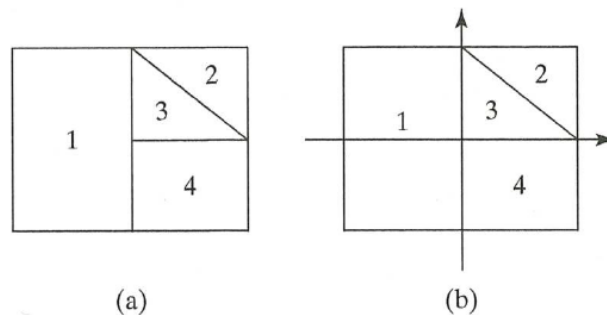


Lab 1

To Do:

****5.44** (Monte Carlo simulation) A square is divided into four smaller regions as shown below in (a). If you throw a dart into the square 1,000,000 times, what is the probability for a dart to fall into an odd-numbered region? Write a program to simulate the process and display the result.

(Hint: Place the center of the square in the center of a coordinate system, as shown in (b). Randomly generate a point in the square and count the number of times for a point to fall into an odd-numbered region.)



Hint:

To generate a random point, generate a random number x between -1 and 1 and a random number y between -1 and 1 with two points of precision (like I did in the lecture)

Submit:

When you are done submit your text file to Brightspace dropbox. To do this click Assessments and then Assignments and then click on Lab 1 and submit your text file