

Comp 170 - Steil

Assignment: The Chaos Game Algorithm

Points: 20

Goal:

Write an algorithm to that will solve the Chaos Game problem in the “best score” number of moves.

Links:

The Chaos Game was created by Johanna Voolich and Robert L. Devaney at Boston University.

[Java Runtime Environment \(JRE\)](#) You will need to download and install this first. (Sorry for the inconvenience)

Your web browser may also ask for you to install a plug-in, you will need to do that as well.

[Instructions for the Chaos Game](#)

[Play the Chaos Game](#)

Making the grade:

All instructions should be clear and concise. Points will be deducted for ambiguities.

20 for an algorithm that works for all four difficulty levels.

17 for an algorithm that works for at least one of the difficulty levels.

12 for an algorithm that works part of the time for at least one difficulty levels.

10 for an algorithm or notes that show evidence of a solid attempt.

5 for a poor attempt.

Resources rules:

1. You may **not** use the internet or any other resource to find a solution to this assignment.
2. You may **not** copy or read another students algorithm.
3. You are encouraged to talk to other students from your class to work through the logic.

Primitives:

References to the three corners/directions (Left, Top & Right)

Moves made in any of the three directions.

References to the “highlighted triangle”

References to a “containing triangle”

References to the “outermost triangle”

References to any other triangle in relation to the above

Comparison between the sizes of triangles

Note:

There are three types of Chaos Games available. You are only charged with the first one.