

CS380 Computational Geometry Spring 2013

Homework:	6	Professor:	Dianna Xu
Due Date:	4/9/13	E-mail:	<code>dxu@cs.brynmawr.edu</code>
Office:	Park 246A	URL:	<code>http://cs.brynmawr.edu/cs380-01</code>

Assignment 6

1. O'Rourke Exercise 5.3.
2. O'Rourke Exercise 5.4.
3. O'Rourke Exercise 5.10.
4. **Theory Choice** O'Rourke Exercise 5.8 and 5.40.
5. **Implementation Choice** O'Rourke Exercise 5.33. Write a program that takes as input a polygon (a list of vertices on the boundary, in ccw order), and repeatedly applies the midpoint transformation to it. Perhaps take the number of iterations as input as well. Work out some way to display the results, so you can see the shape after all iterations are completed. Form a conjecture based on experiments with your code. You should do enough experiments to make sure that you are not forming a theory based only on special cases.