6.849: GEOMETRIC FOLDING ALGORITHMS Fall 2012 — Prof. Erik Demaine, Jayson Lynch

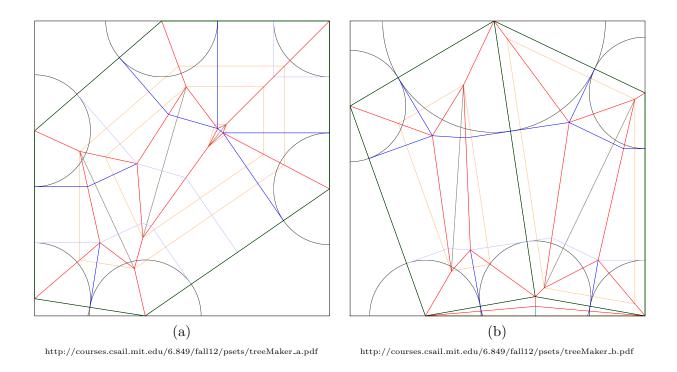
Problem Set 2

Due: Tuesday, September 25th, 2012

We will drop (ignore) your lowest score on any one problem.

Problem 1. Design a piece of origami using either TreeMaker or Origamizer, and fold it. Use your judgement of reasonable complexity to work within your folding ability. This problem aims to give you experience using algorithmic tools for origami design, and some practice for how well these work (or fail) to fold. Submit your intended design, any issues you encountered, resulting crease pattern, and your folded origami. Please send a digital copy of the design to 6849-staff@csail.mit.edu.

Problem 2. Identify the shadow tree in the TreeMaker designs given by the crease patterns below.



Problem 3. Identify all creases in the above TreeMaker diagrams which are active paths at any time during the universal molecule construction process.