6.849: Geometric Folding Algorithms Fall 2012 — Prof. Erik Demaine

Problem Set 2 Solutions

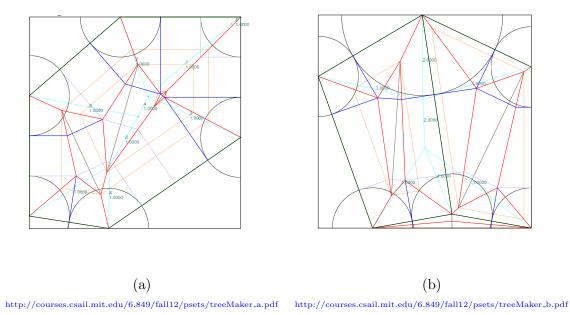
We will drop (ignore) your lowest score on any one problem.

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.

Solution: There is no one correct answer.

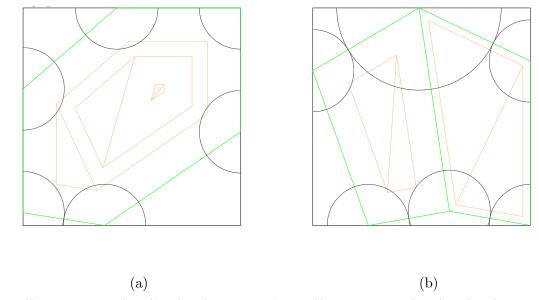
Problem 2. Identify the shadow tree in the TreeMaker designs given by the crease patterns below.

Solution: Given below by the light blue tree with length labels.



Problem 3. Identify all paths that are active at any time during the universal molecule construction process (not just at the beginning), in the TreeMaker diagrams given by the crease patterns above.

Solution: Given below.



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