

Due by Tuesday 2/3

1. Fold a maximum-size hexagon from a square. Use the handout by David Dureisseix as a starting point.

Explain why the construction you folded actually produces a regular hexagon. (After this homework is handed in, we will discuss your explanations and talk about mathematical proofs.)

2. Fold a pattern of concentric polygons similar to the one that creates the hyperbolic paraboloid. Make the polygons either hexagons or octagons. You can use Tom Hull's pattern that is also a part of the handouts.

If you prefer, you may use circles, but this will be more difficult, and you'll have to mark the circles somehow in order to fold along them.