

Image by MIT OpenCourseWare.

# regular octahedron & tetramonohedron

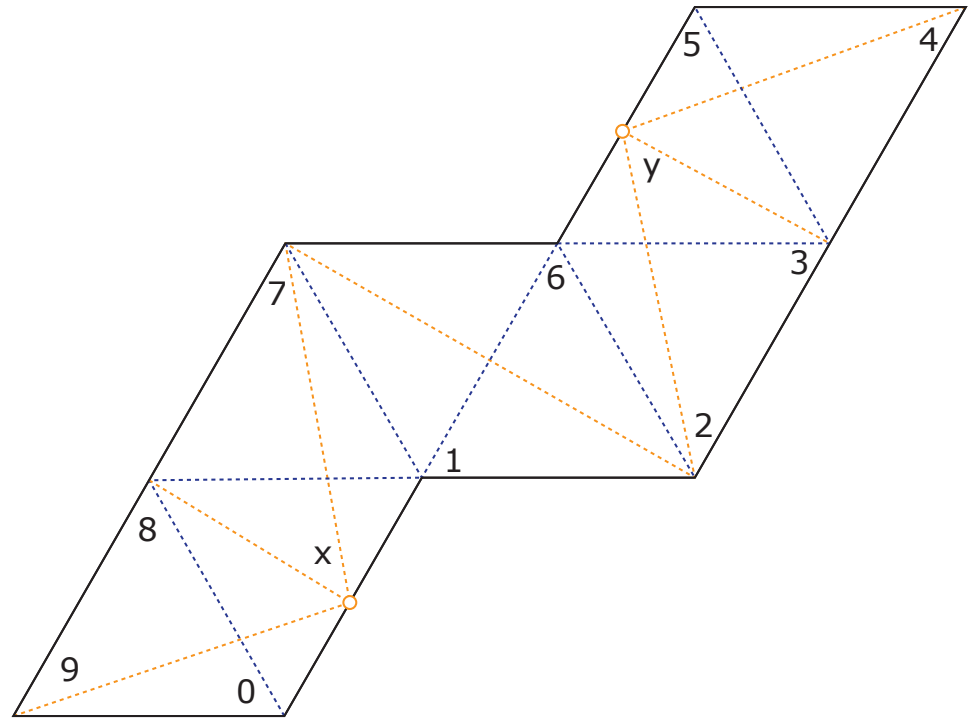
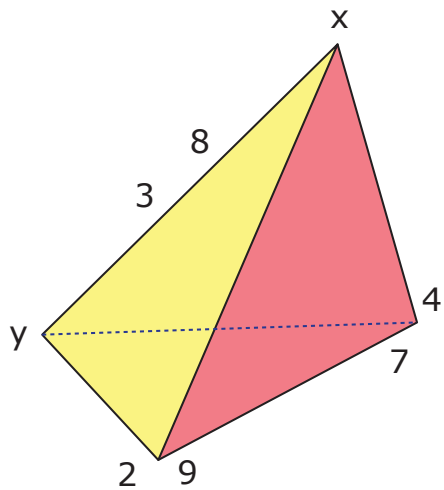


Image by MIT OpenCourseWare.

# regular octahedron & tetramonohedron

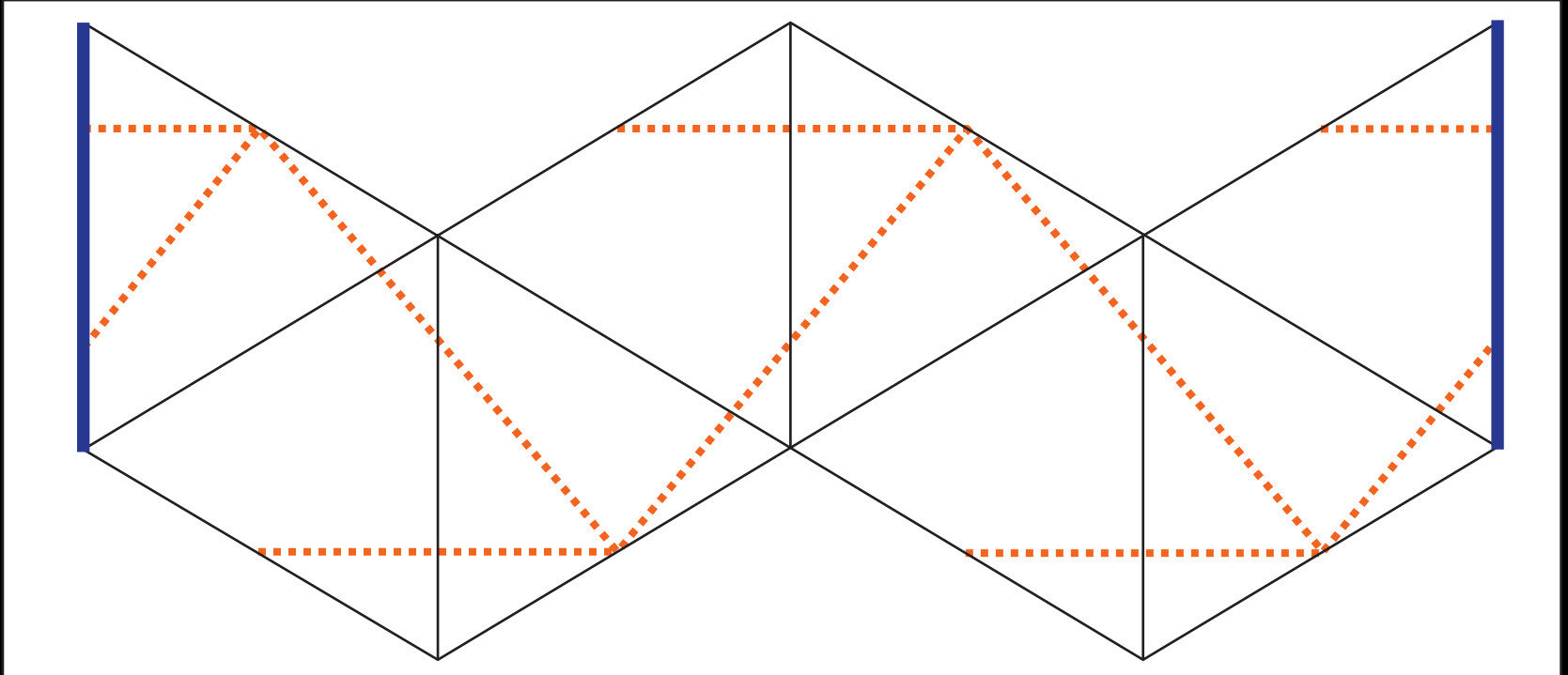
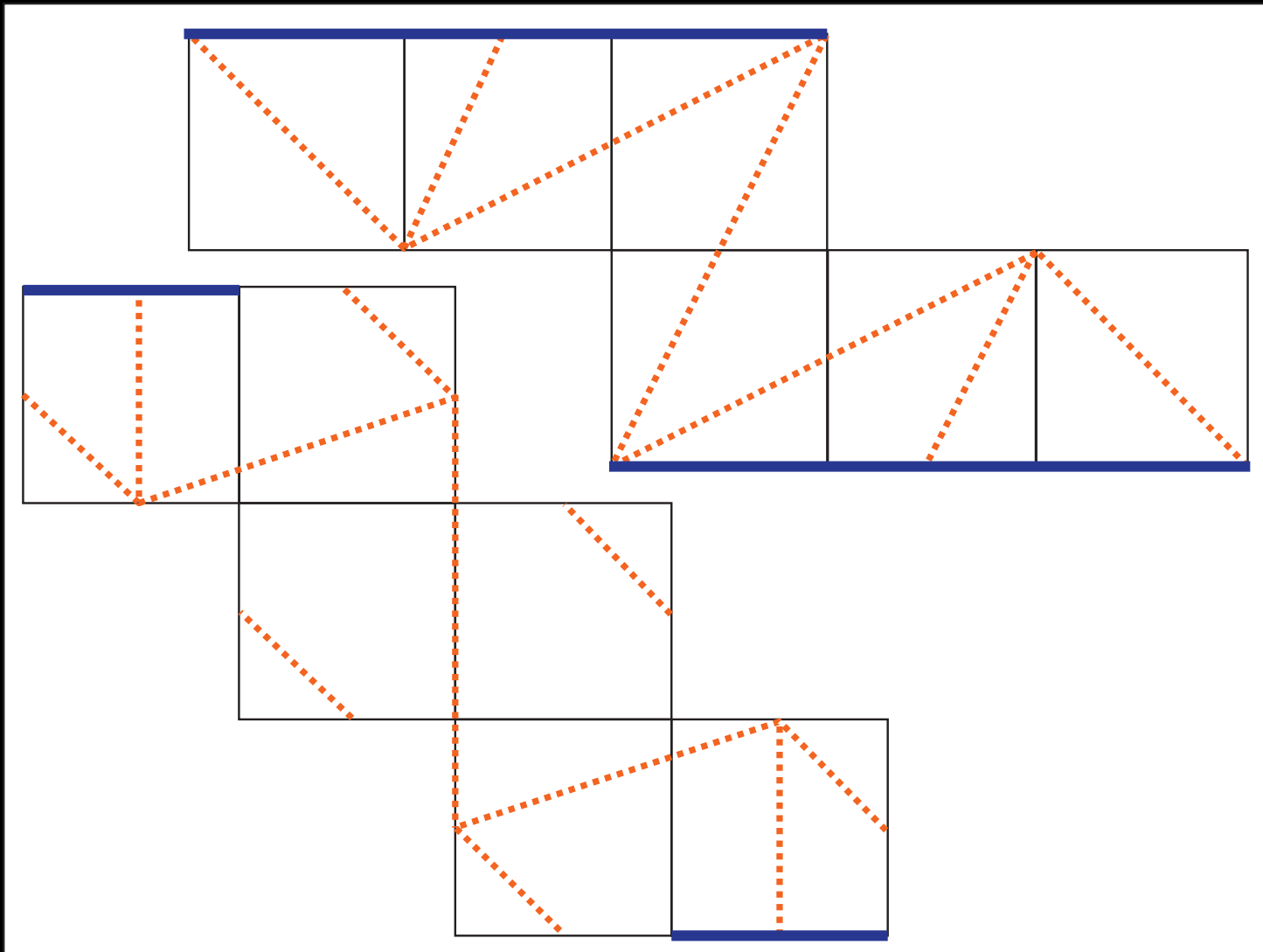


Image by MIT OpenCourseWare.

Horiyama & Uehara 2010

# cube & tetramonohedron



Horiyama & Uehara 2010

Image by MIT OpenCourseWare.

# regular icosahedron & 1 : 1.145 : 1.25 tetramonohedron

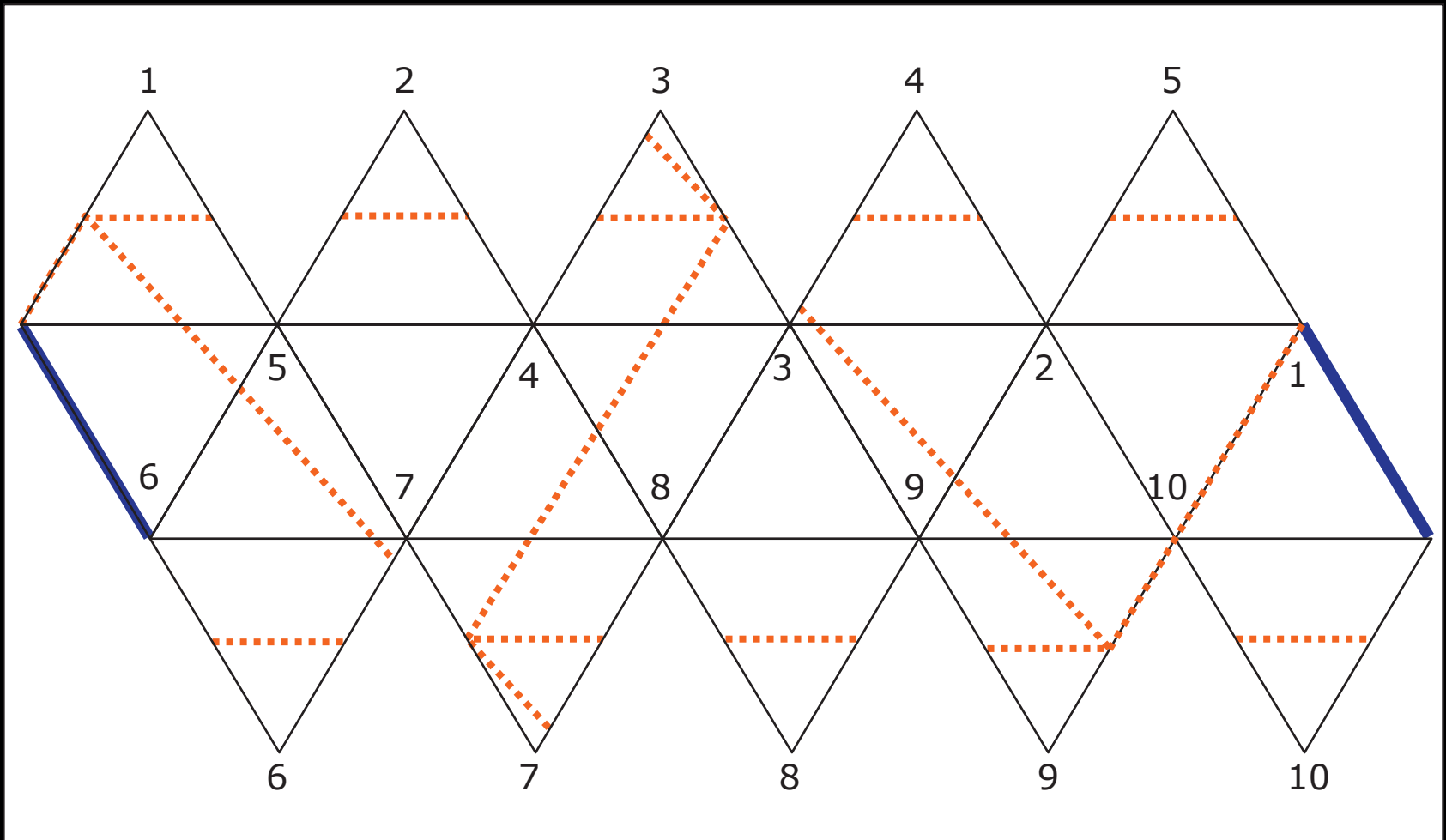
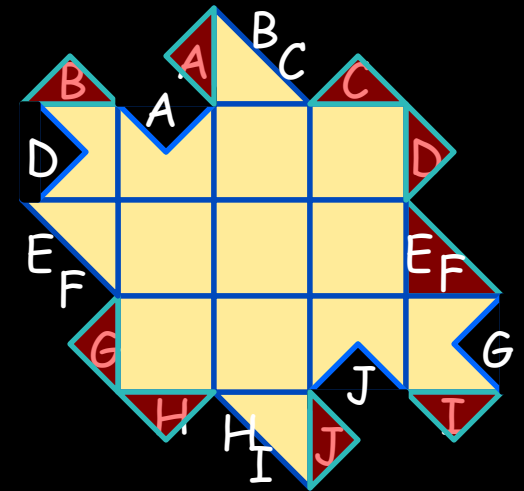
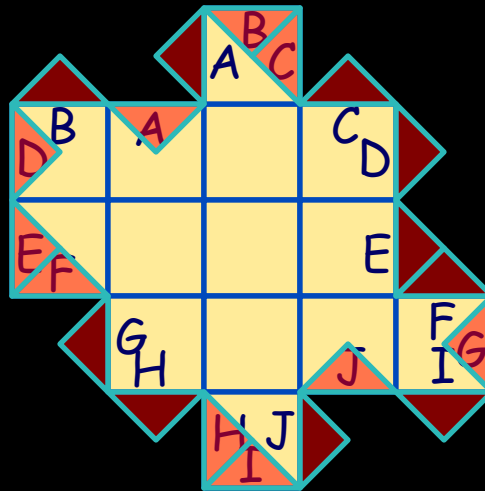
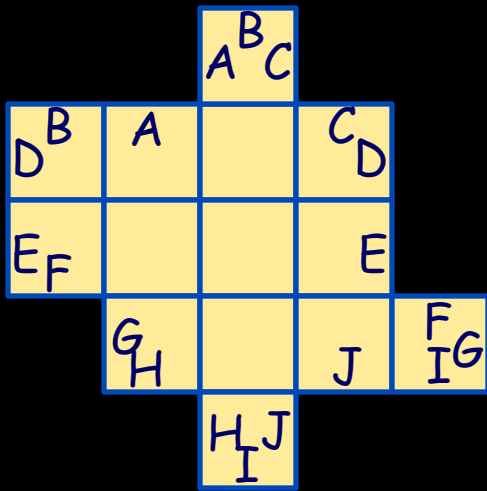


Image by MIT OpenCourseWare.

Horiyama & Uehara 2010

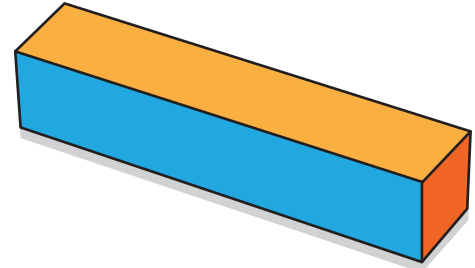
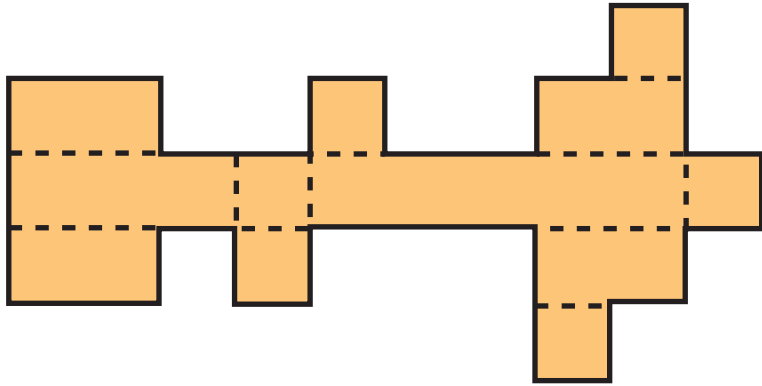
Unfolding diagram removed due to copyright restrictions.

# unfoldings of $\sqrt{2} \times \sqrt{2} \times 3\sqrt{2}$ box

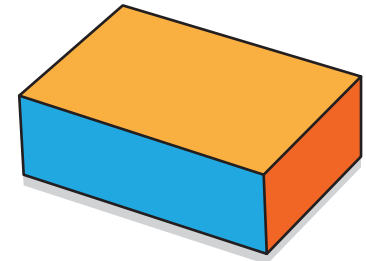
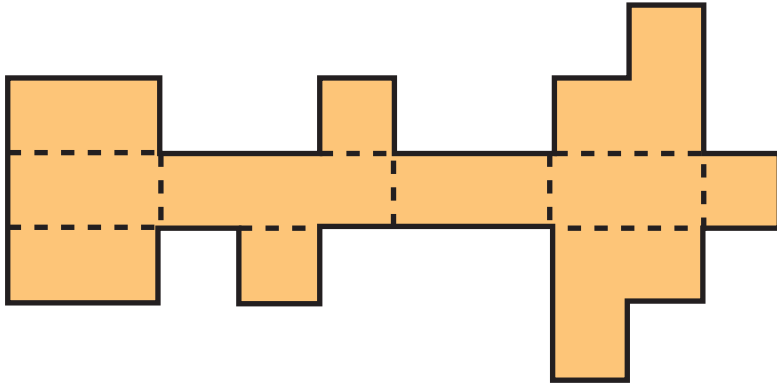


unfolding of  
 $1 \times 2 \times 4$  box

Timothy Chan, 1999



$5 \times 1 \times 1$

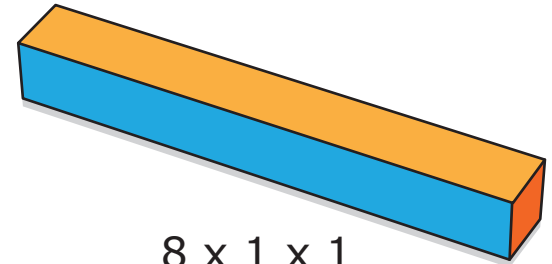
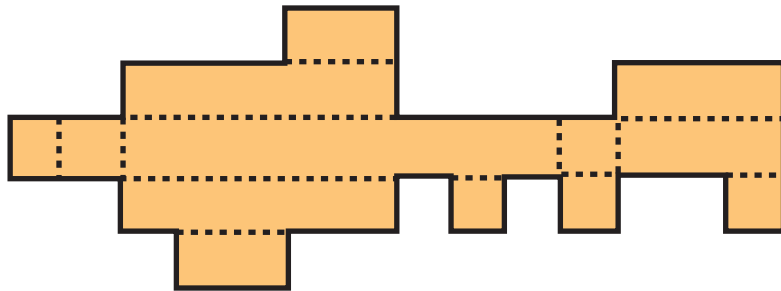


$3 \times 2 \times 1$

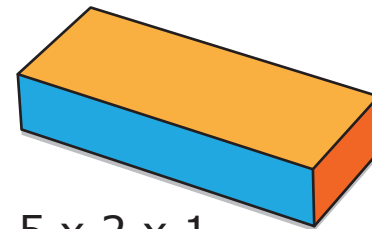
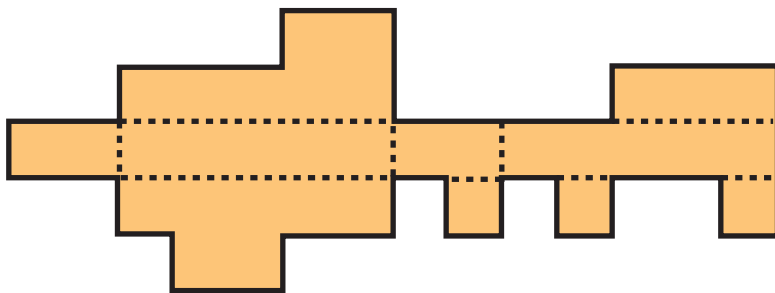
Image by MIT OpenCourseWare.

Therese Biedl, 1999





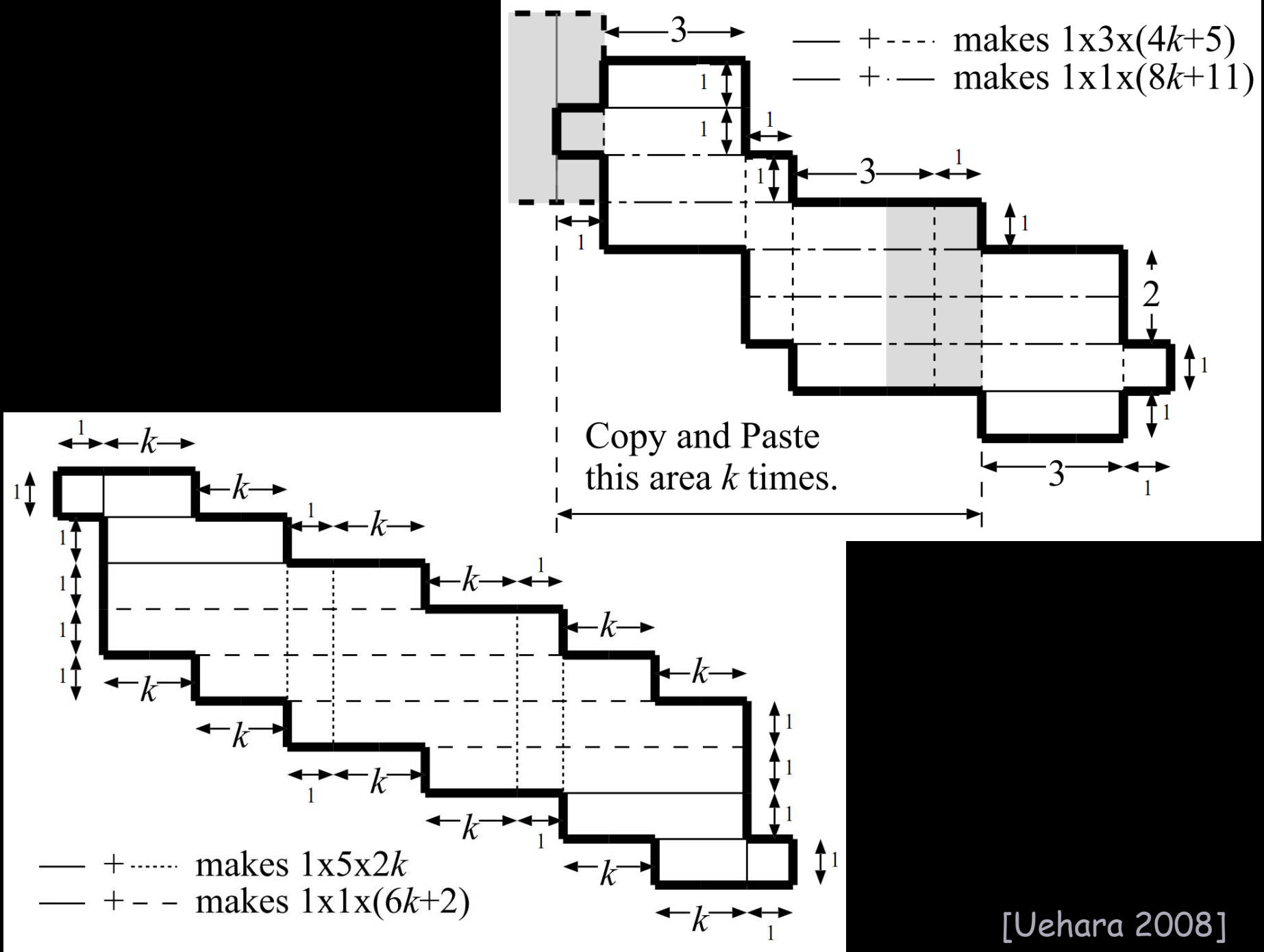
$8 \times 1 \times 1$



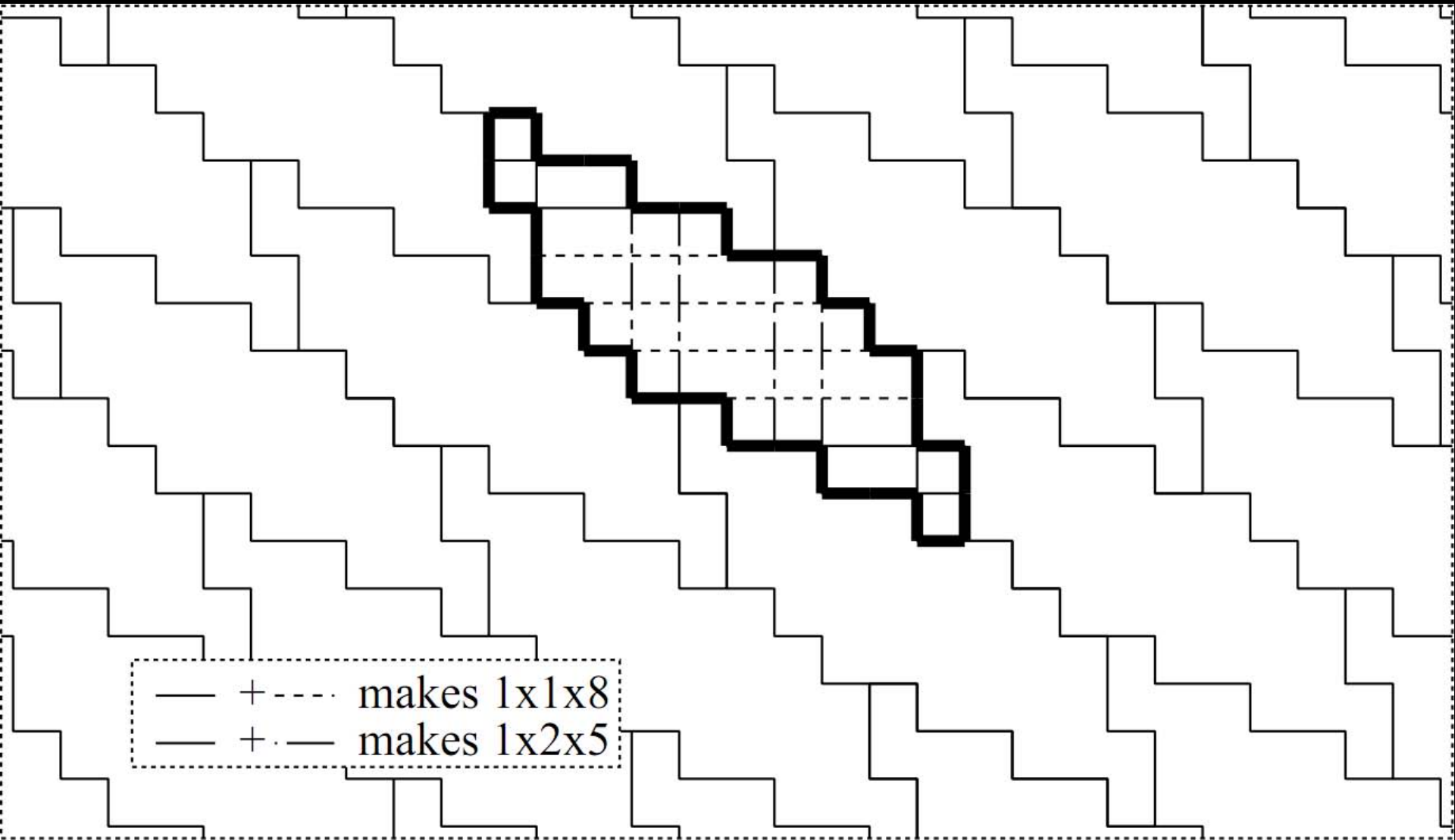
$5 \times 2 \times 1$

Image by MIT OpenCourseWare.

Therese Biedl, 1999



[Uehara 2008]



Courtesy of Jun Mitani and Ryuhei Uehara. Used with permission.

[Uehara 2008]

# common unfolding of 23 out of 24 pentacubes

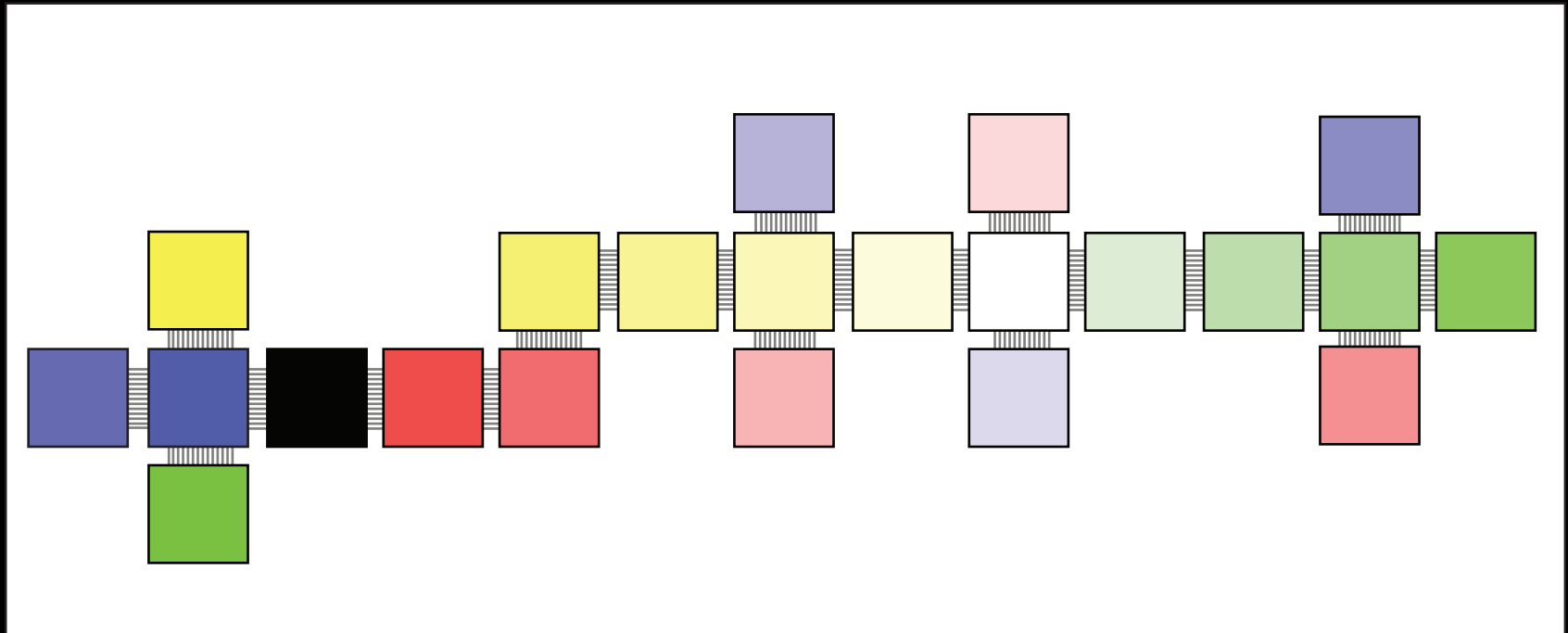


Image by MIT OpenCourseWare.

[Aloupis, Benbernou, Bose, Collette, Demaine, Demaine, Douieb, Dujmović, Iacono, Langerman, Morin 2010]

# unique common unfolding of nonplanar pentacubes ( & 22 total pentacubes )

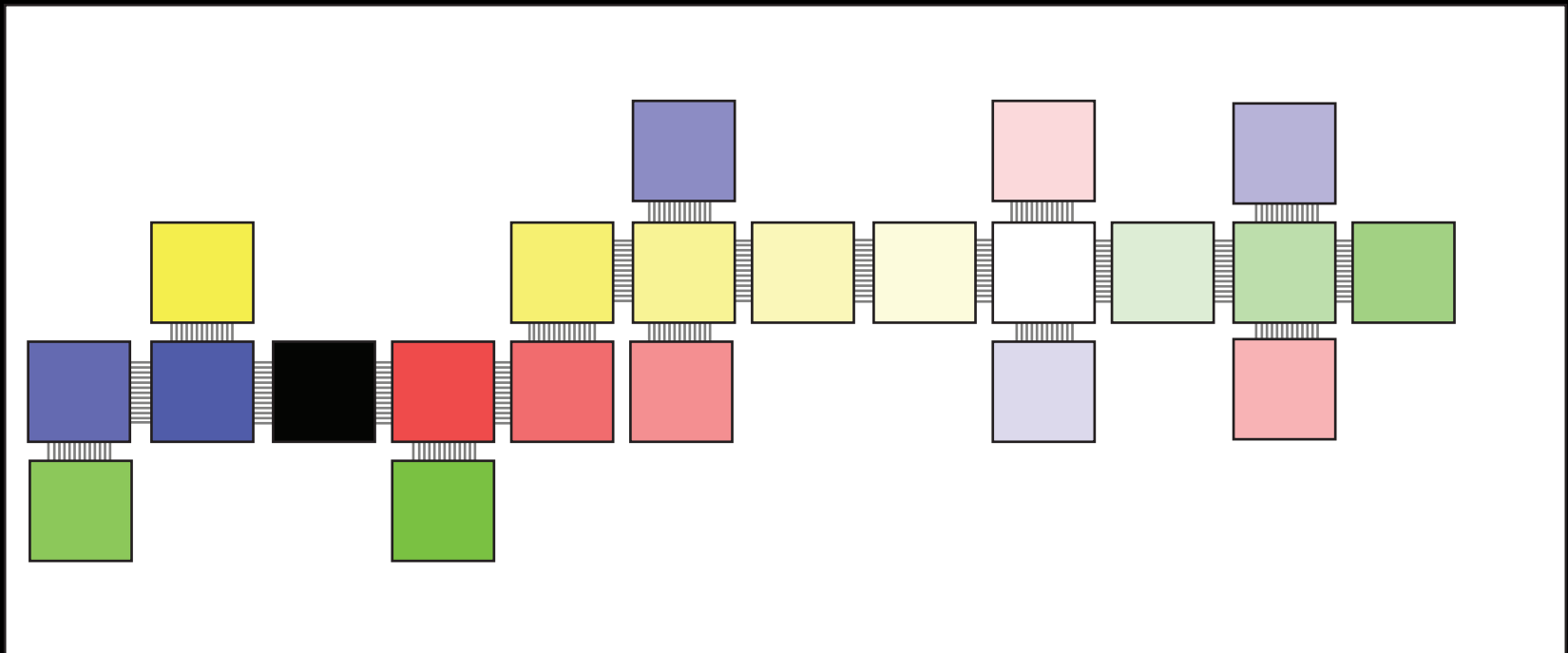


Image by MIT OpenCourseWare.

[Aloupis, Benbernou, Bose, Collette, Demaine, Demaine,  
Douieb, Dujmović, Iacono, Langerman, Morin 2010]

# common unfolding of planar pentacubes (& no nonplanar pentacubes)

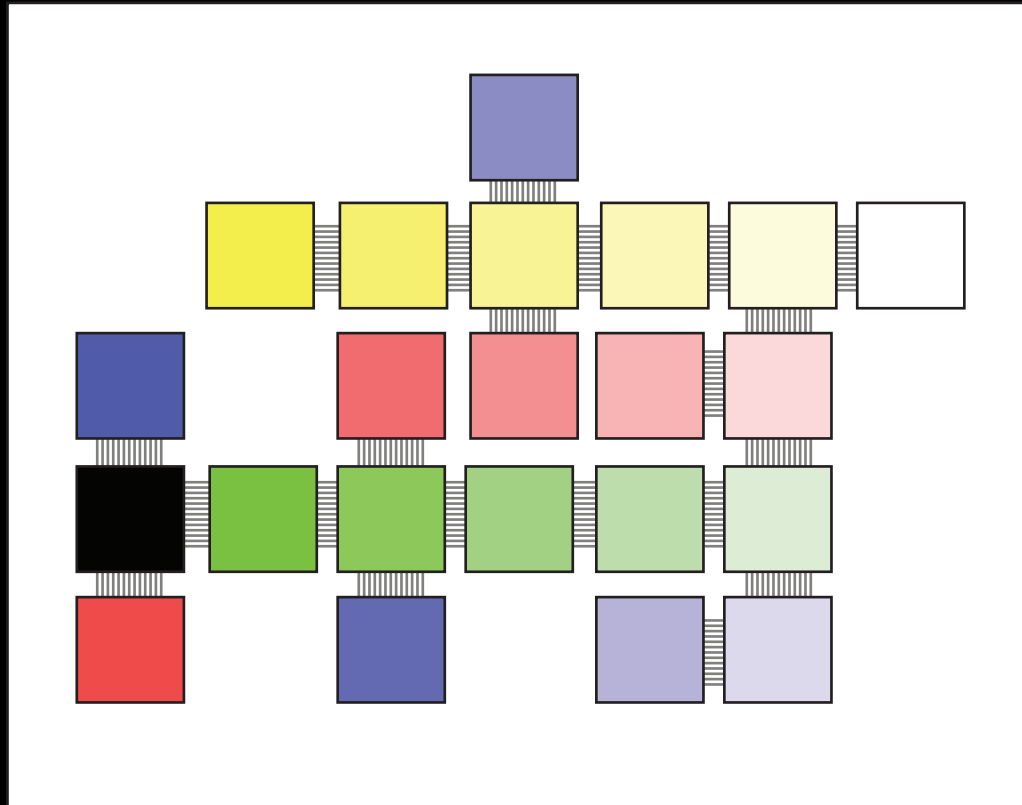


Image by MIT OpenCourseWare.

[Aloupis, Benbernou, Bose, Collette, Demaine, Demaine,  
Douieb, Dujmović, Iacono, Langerman, Morin 2010]

Screenshot of applet showing pentacubes removed due to copyright restrictions.

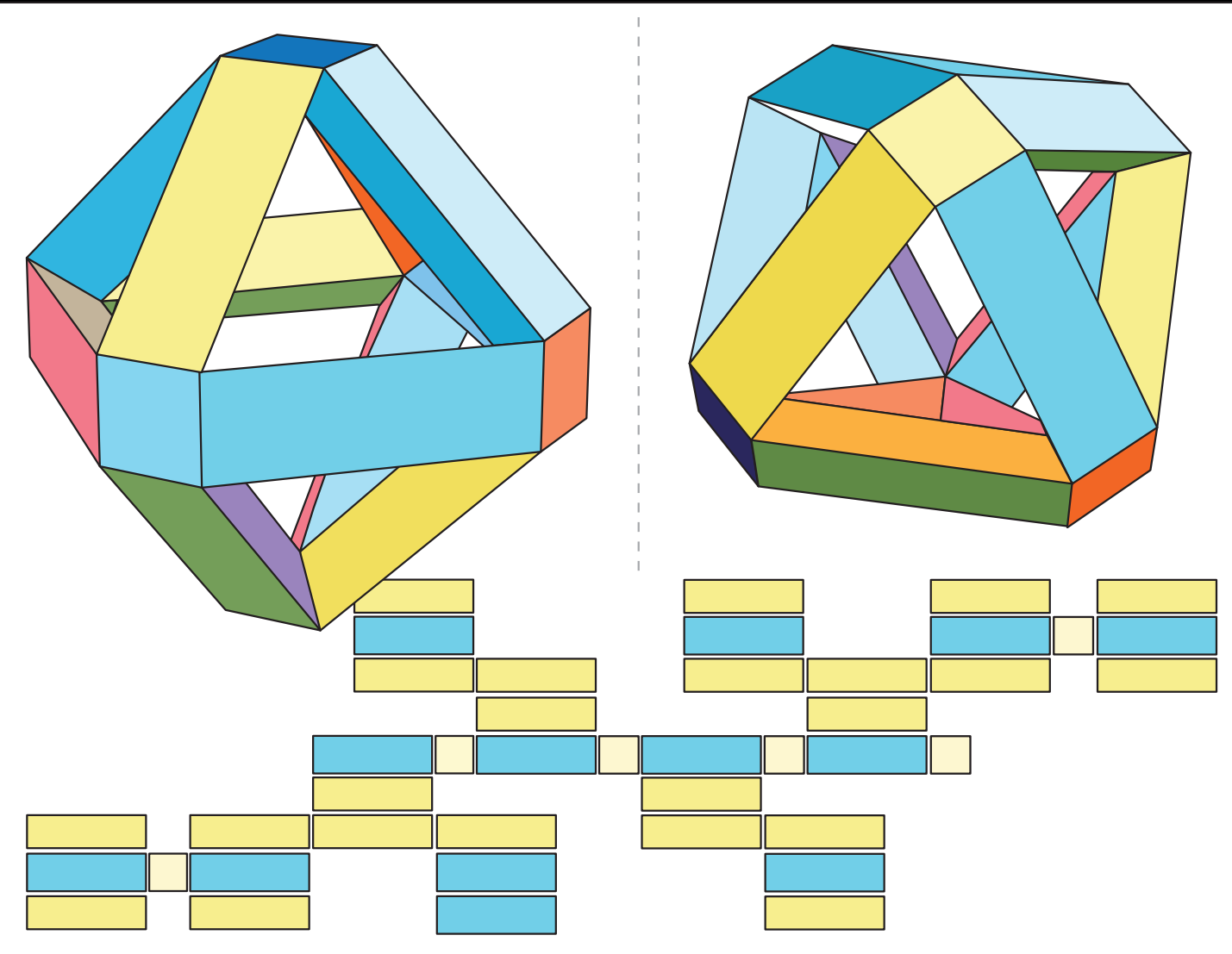


Image by MIT OpenCourseWare.  
 See also <http://arxiv.org/abs/cs/0110059/>.

[Donoso &  
 O'Rourke  
 2002]



Base polyhedron with genus 11 and net, and Polyhedron with genus 6 and net removed due to copyright restrictions.

Refer to: Fig. 2-4 from Biedl, T., T. M. Chan, et al. "Tighter Bounds on the Genus of Nonorthogonal Polyhedra Built from Rectangles." *Proceedings of the 14th Canadian Conference on Computational Geometry* (2002): 105-8.

# D-forms

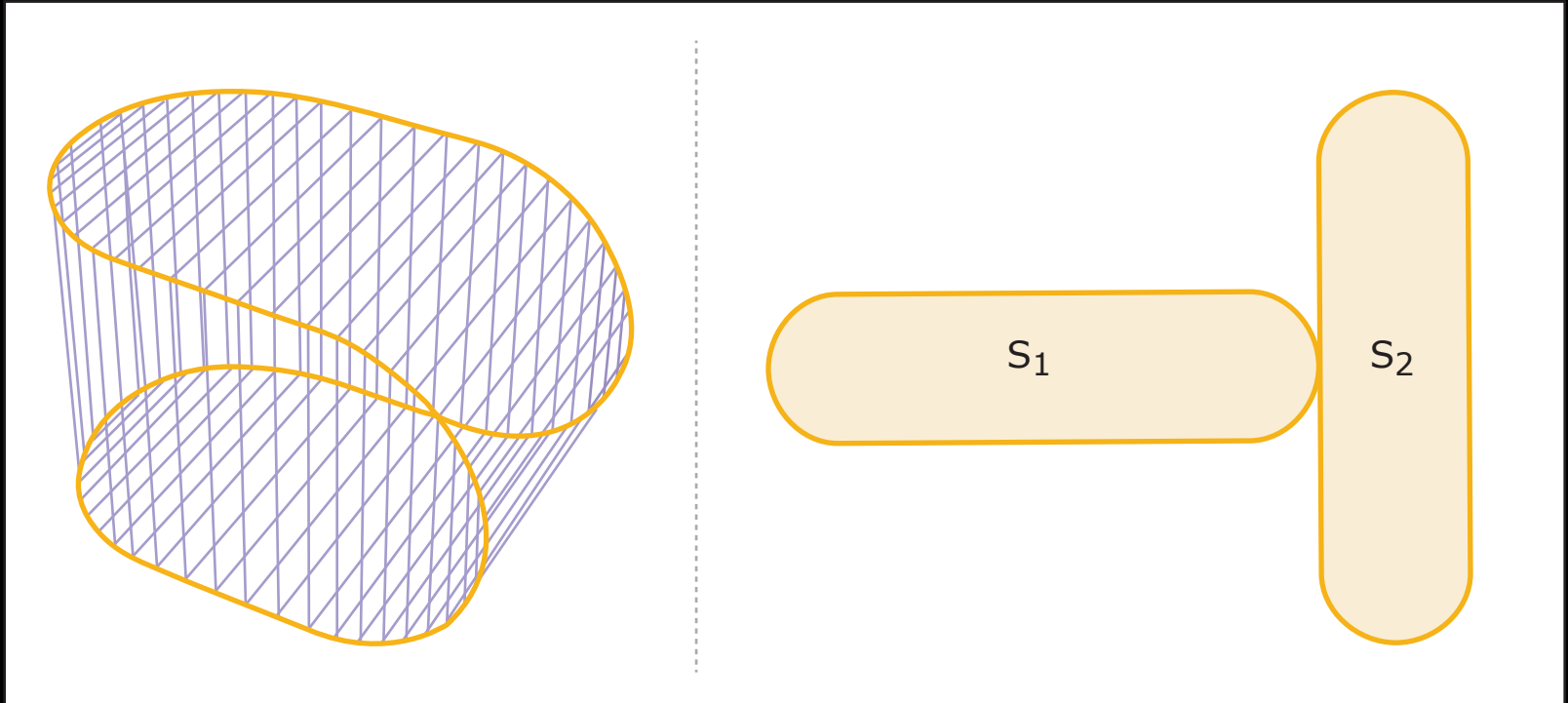


Image by MIT OpenCourseWare.

Tony Wills

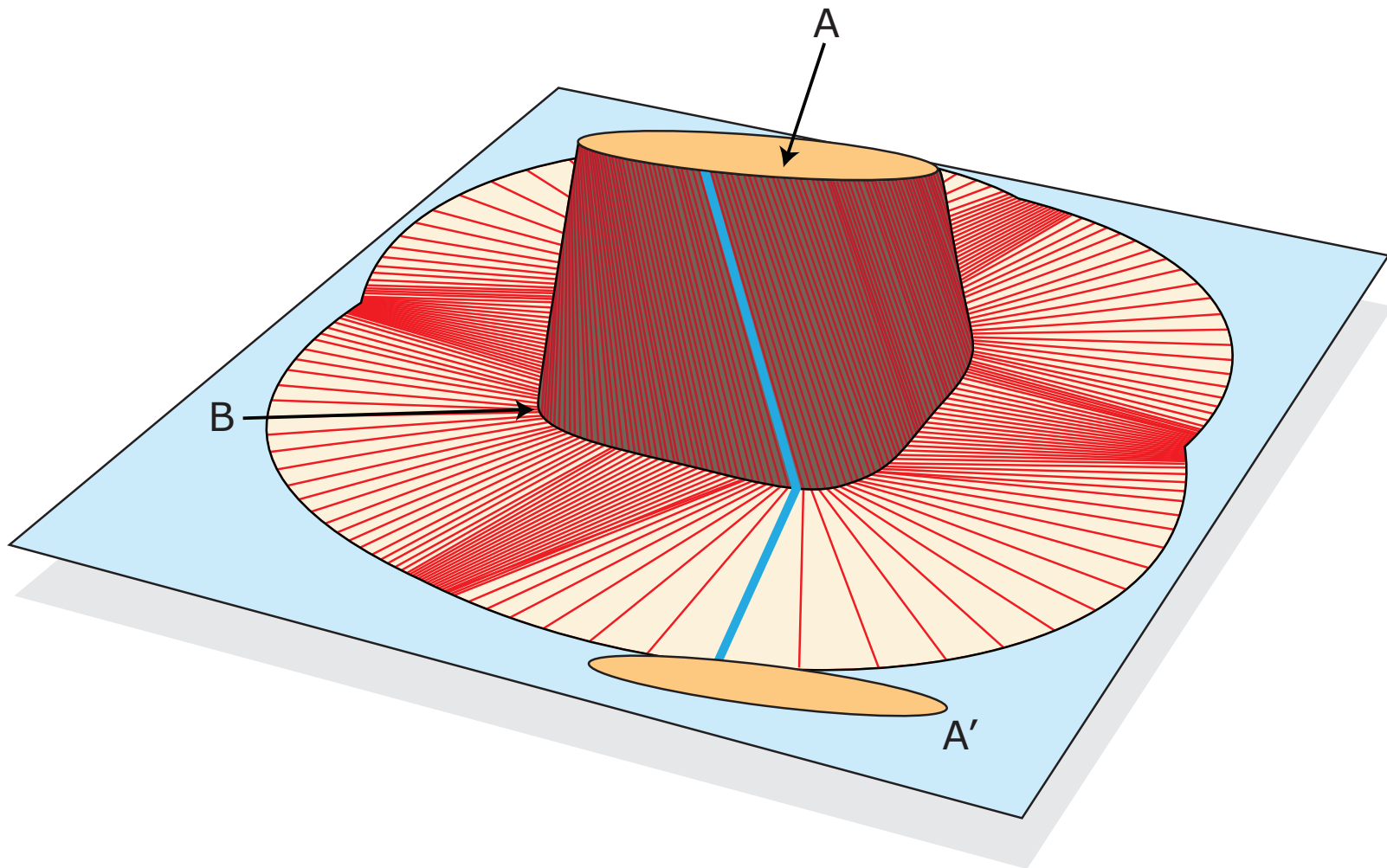
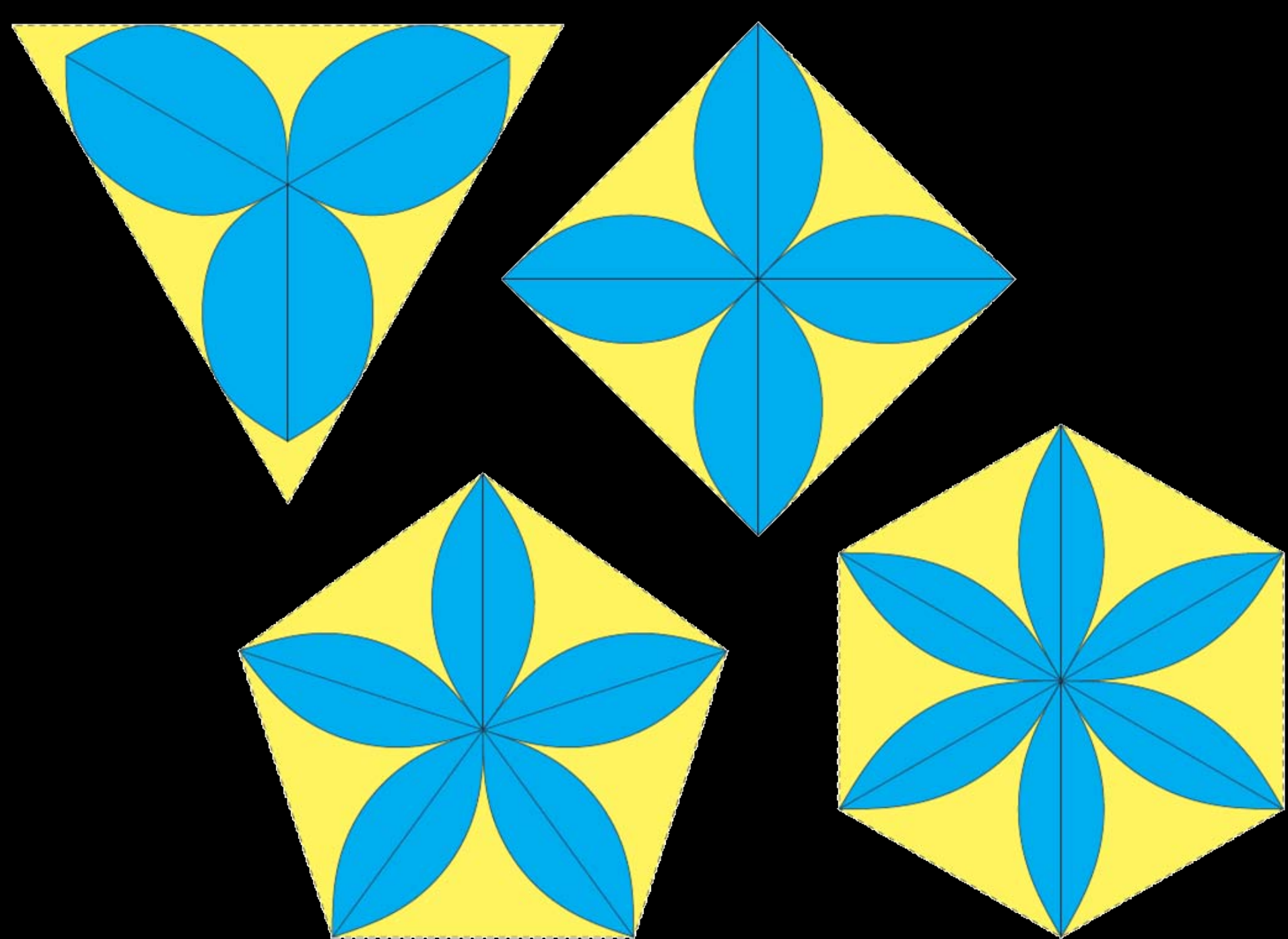
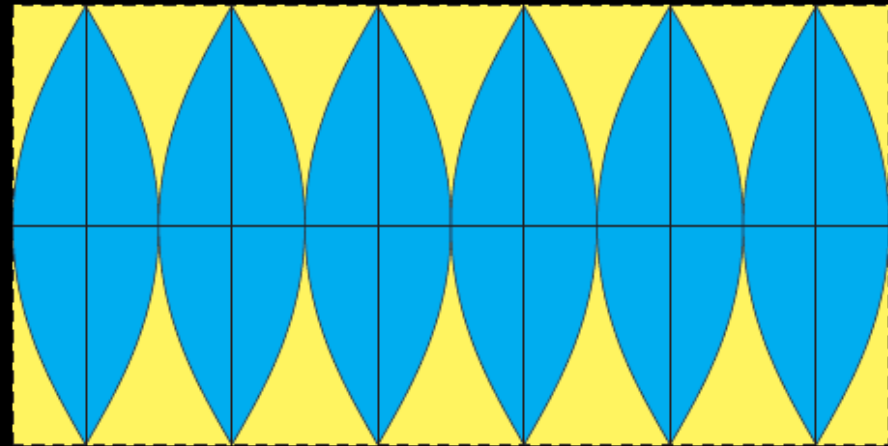
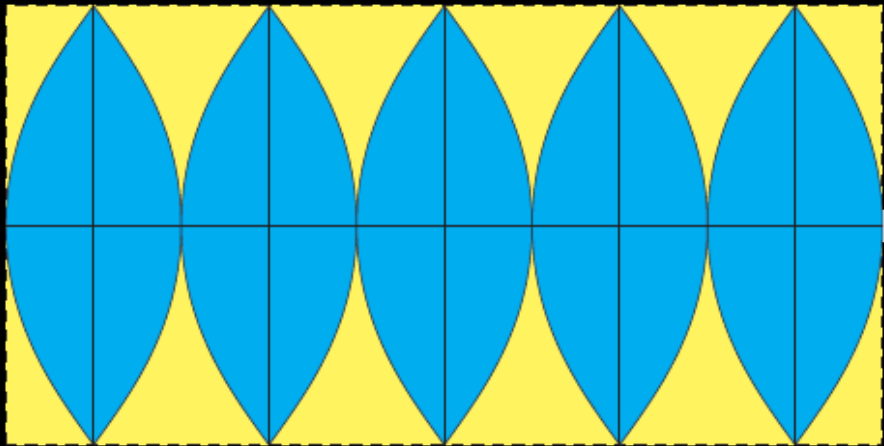
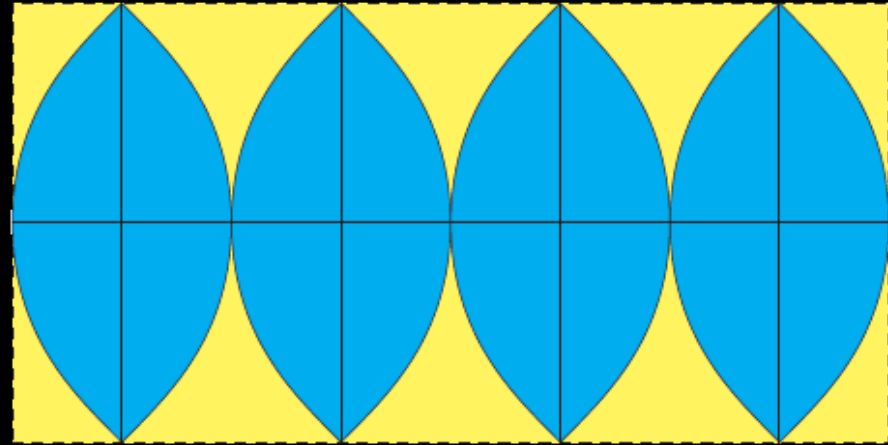
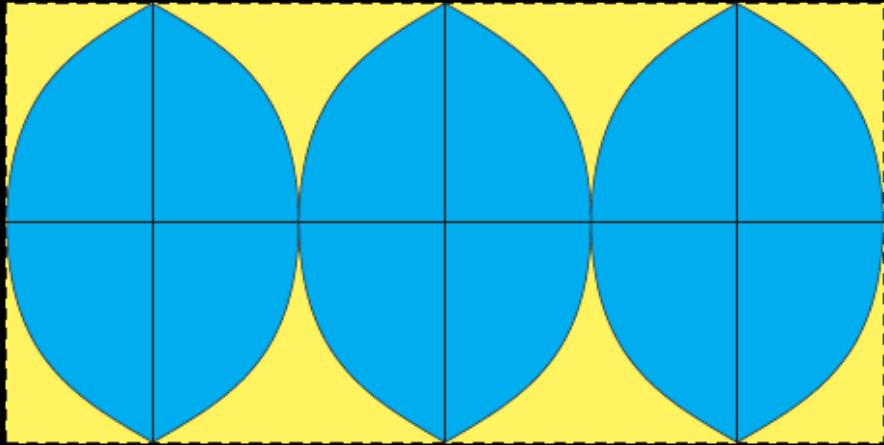


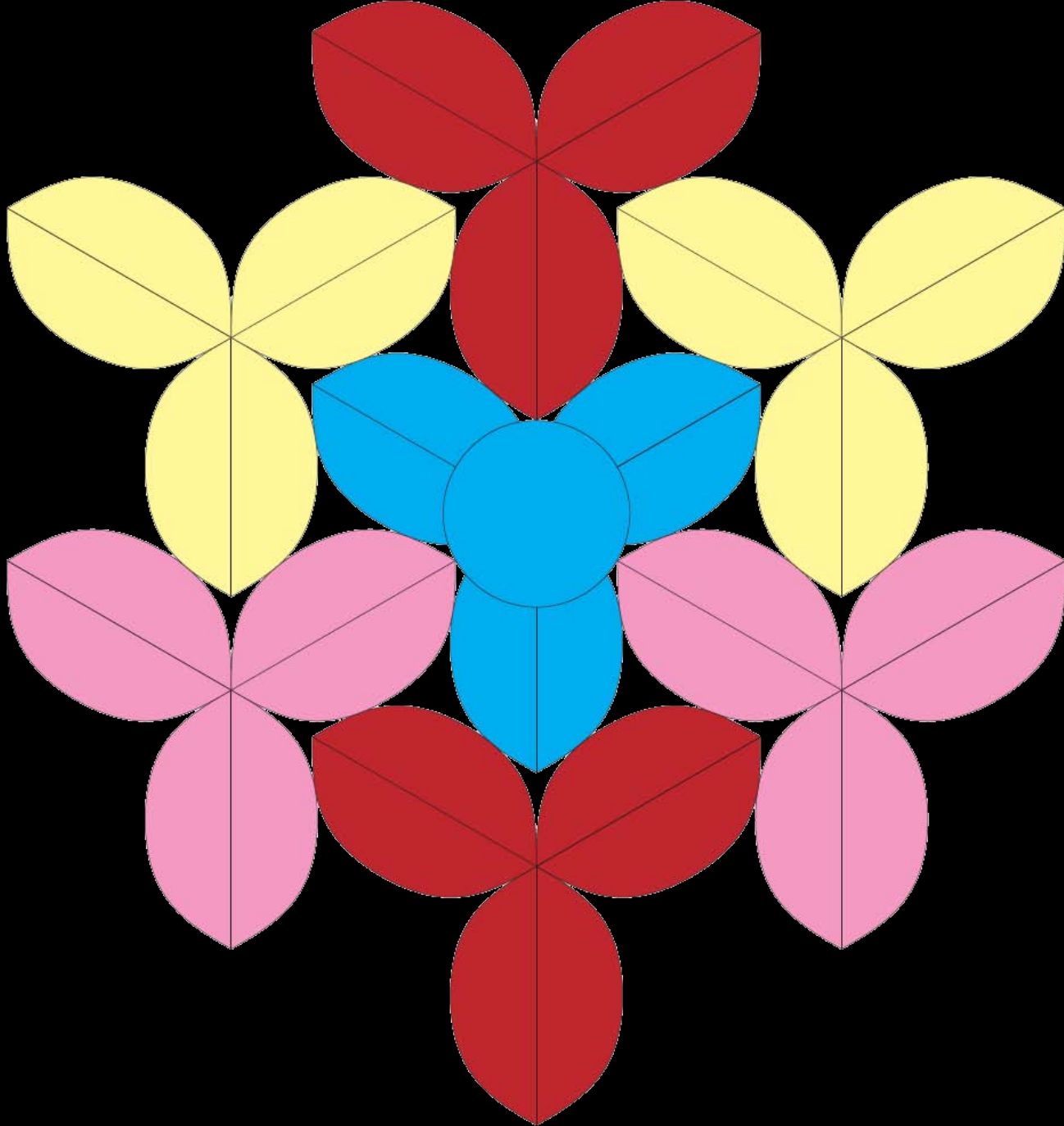
Image by MIT OpenCourseWare.

[Benbernou, Cahn, O'Rourke 2004]

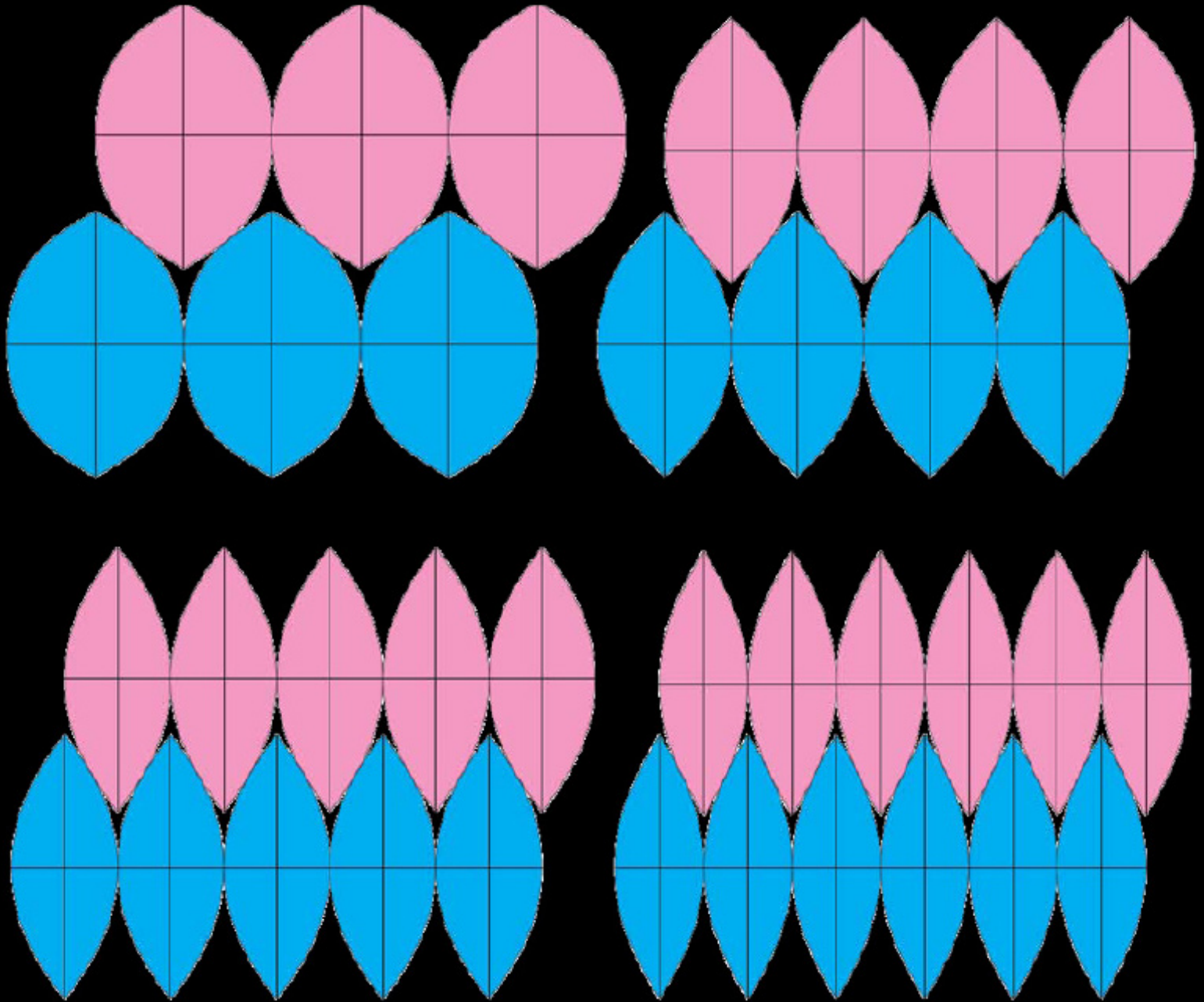


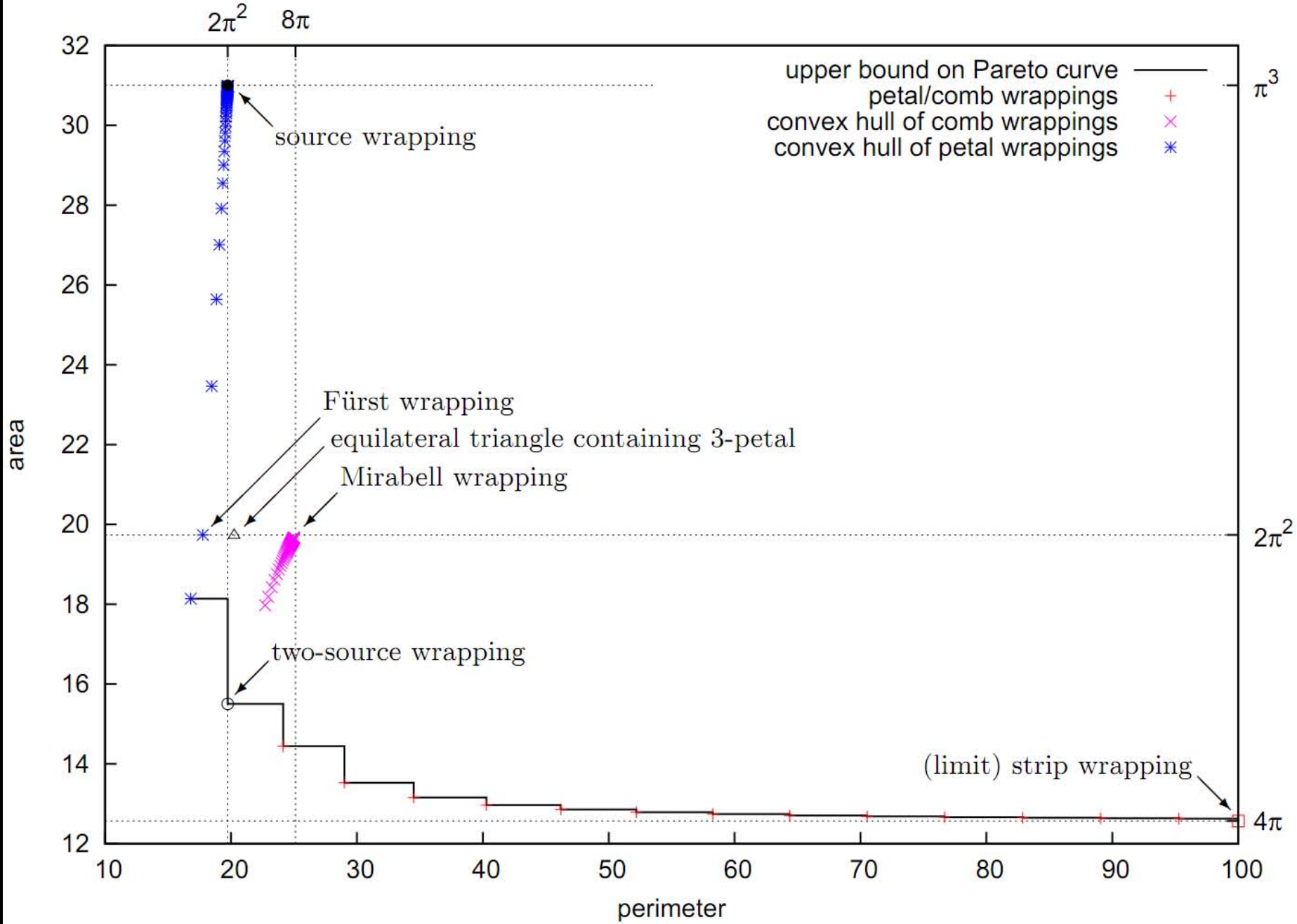


Courtesy of Erik D. Demaine, Martin L. Demaine, John Iacono, and Stefan Langerman. Used with permission.



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[Demaine, Demaine, Iacono, Langerman 2009]



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6.849 Geometric Folding Algorithms: Linkages, Origami, Polyhedra  
Fall 2012

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