



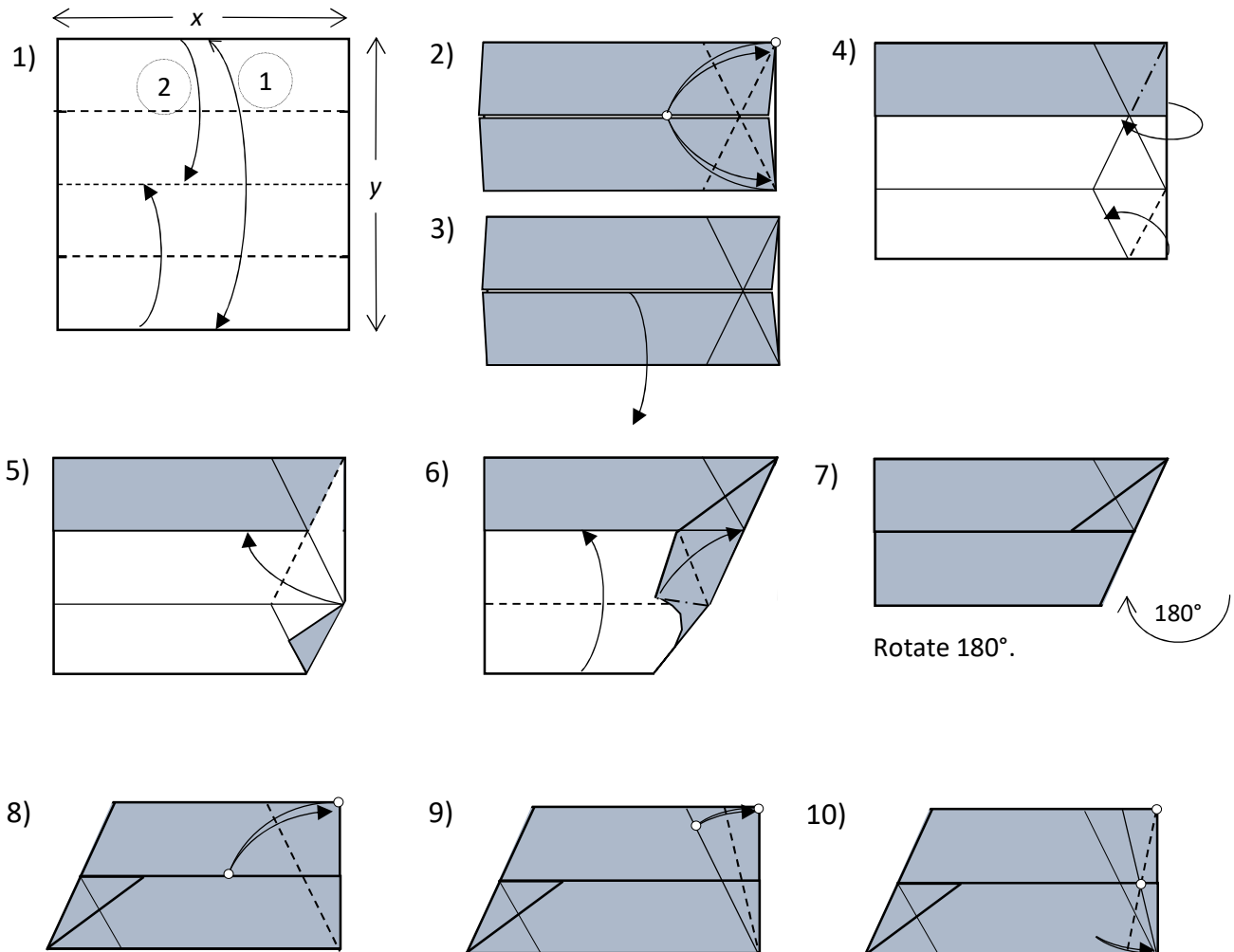
Rhombic Dodecahedron (Kusudama)



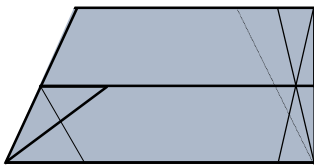
Background: the model is based on the „Jade“ folding in *Kusudama Origami* by E.Lukasheva, p.20. However, the rhombic dodecahedron has corners with 3 and 4 edges, which require different contact angles between neighbouring edges. Experiences showed that a satisfying approach is to use the ordinary 60° fold for the 4-edged corners, and a 75° fold for the 3-edged corners.

Paper ratio: the longer the paper for the edges is, the bigger the rhombic holes get. For instance, for the nested dodecahedrons shown at top right, the sizes 4x3 (outer), 3x3, 2x3 (inner) in cm were used. There is a limit, however, for increasing the height (y) compared to the width (x), which lies approximately by $y/x = 1,75$. For larger ratios, left and right flaps interfere. For the diagrams, the ratio 1:1 is taken.

24 units are needed.

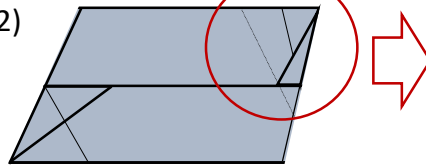


11)

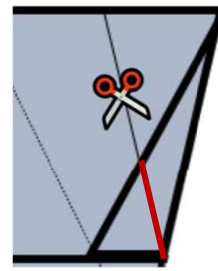


Repeat steps 4-6 with creases of steps 9-10.

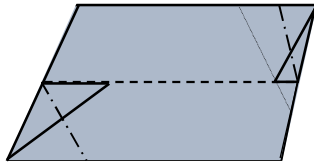
12)



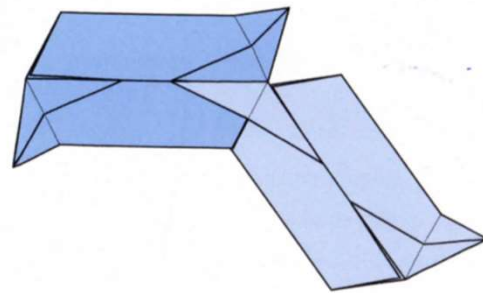
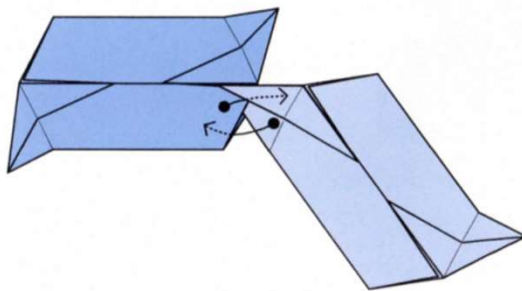
Make a small cut so that flap of neighbour unit can be inserted.



13)

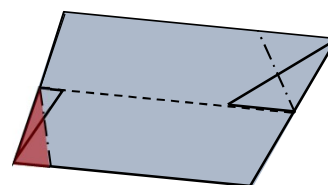
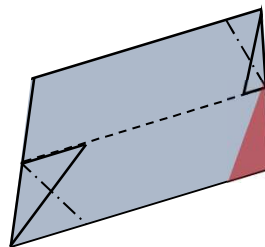


Fold marked creases.



To connect units at 4-edge corners (60° edges), tuck a big flap into a bog pocket and a small flap into a small pocket at the same time.

To connect units at 3-edge corners (75° edges), shift red part of right unit into red part of left unit. (And fix with some glue, if necessary.)



Link always 4 60° -edges together, and 3 75° -edges, according to shown patterns*:

* Wikipedia

