

PLEASE NOTE: If your two-sided printer does not line the images up exactly, it is suggested that you print onto two separate pages and glue together back-to-back. Just make sure that the correct image rows are on the top of both sides.

MO MATH
MUSEUM OF MATHEMATICS

If you think the flexigon is cool, you should check out our traveling exhibition, **The Math Midway**, at mathmidway.org! And, if you think the Math Midway is exciting, you should visit momath.org to learn more about the **Museum of Mathematics**, America's only museum focused on mathematics! And, if you think that is amazing, then click on **Support** and be part of bringing the Museum of Mathematics to life!

I will be face down!

momath.org

PLEASE NOTE: If your two-sided printer does not line the images up exactly, it is suggested that you print onto two separate pages and glue together back-to-back. Just make sure that the correct image rows are on the top of both sides.

This side face up to fold. This is top left corner.

How to assemble your cyclic hexatetra flexagon:



1. Using a pair of scissors, cut along the outside of the 8"x8" large square, and also cut out the middle 4"x4" square.



2. Fold in both directions along all lines to ensure ease of movement in the finished flexagon.



3. With this side face up (note identifying text in the upper left corner graphic square), make three folds inward, beginning with the left side column and moving clockwise around the flexagon [see images 3b-3d].







4. PLEASE READ ALL OF STEP 4 BEFORE ATTEMPTING FINAL FOLD. Before making the final fold, take a moment to locate the two star images (one will be on the bottom left panel, and one will be on the reverse side). In order to get these images to end up face-to-face, you will first hold the bottom left flap open. As you use your right hand to fold the bottom right squares upward, hold the bottom left corner with your left hand, and guide that corner upward and toward the left edge, forcing the bottom left panels to become "inside out". Continue to guide that left seam around so it tucks flat along the left edge of the flexagon. You will know the fold is correct when the small star images end up facing each other, with one on the top and one on the bottom [see image 4a]. The image should now be complete [see image 4b].



5. Once you have the first complete image, you can see a new image by folding opposing sides backward on the vertical crease, then reopening by pulling apart at the fold. To see a third image, fold top and bottom back on the horizontal crease, and reopen by pulling apart at the fold. Continue alternating between vertical and horizontal folds to reveal all six images!

Please visit momath.org/flexagon for more detailed instructions.

momath.org