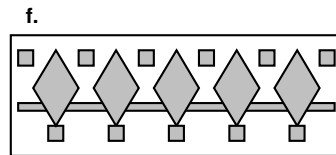
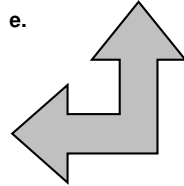
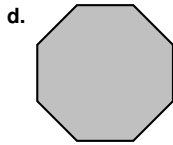
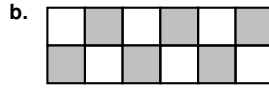
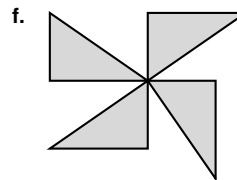
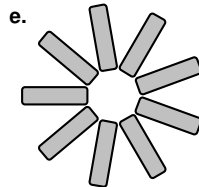
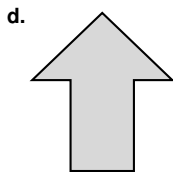
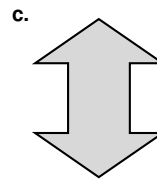
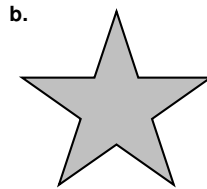
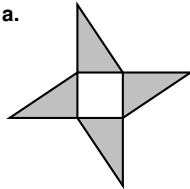


Symmetry: Classwork

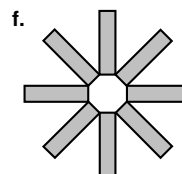
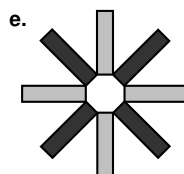
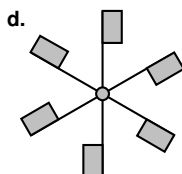
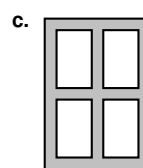
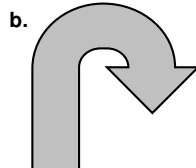
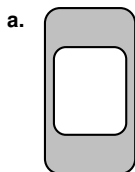
1. Do the designs below have reflection symmetry? If so, draw all lines of symmetry.



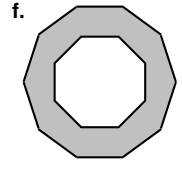
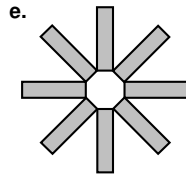
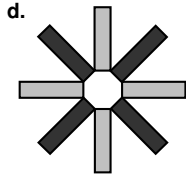
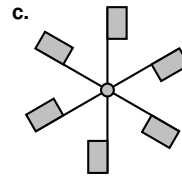
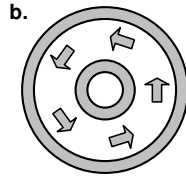
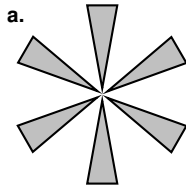
2. Do the designs below have rotation symmetry? If so, give the angle of rotation and all the turns of less than 360° that will rotate the design to a position in which it looks the same as originally pictured. Show your work.



3. Do the designs below have reflection symmetry? If so, draw all lines of symmetry.



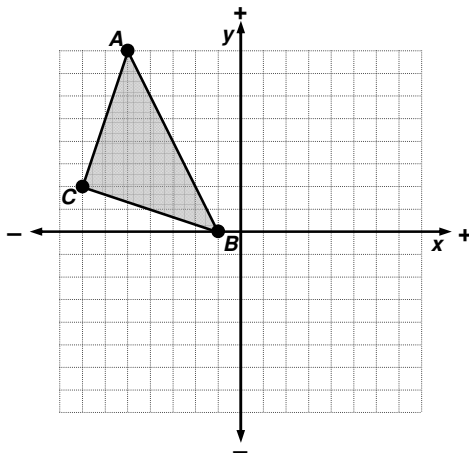
4. Do the designs below have rotation symmetry? If so, give the angle of rotation and all the turns of less than 360° that will rotate the design to a position in which it looks the same as originally pictured. Show your work.



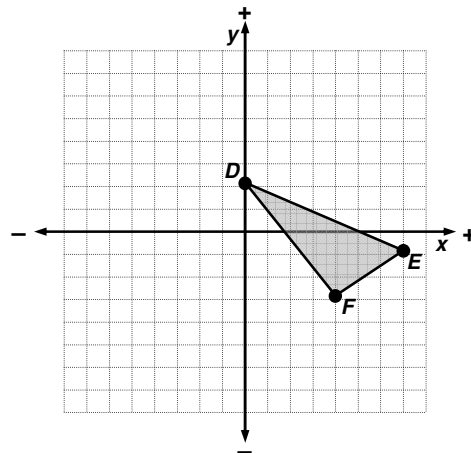
5. Make your own design that has rotation symmetry with a 30° angle of rotation and at least one line of symmetry.
6. Make your own design that has rotation symmetry with a 45° angle of rotation and no lines of symmetry.

7. Draw the following transformations. Be sure to label the points on your image!

- a. Translate the triangle 5 units right and 4 units down, then dilate the image using a scale factor of 2 and the origin as the center of dilation.

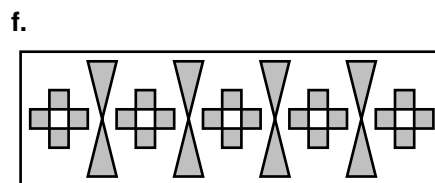
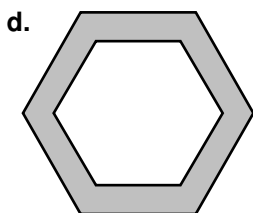
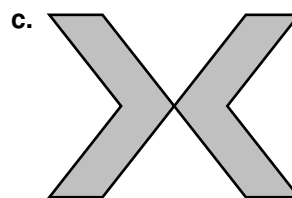
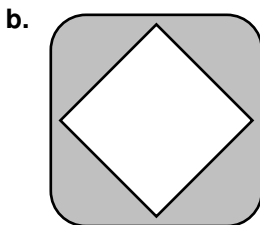
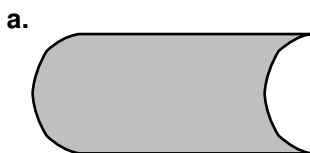


- b. Rotate the triangle 90° counterclockwise about the origin, and then reflect the image across the x-axis.



Symmetry: Homework

8. Do the designs below have reflection symmetry? If so, draw all lines of symmetry.



9. Do the designs below have rotation symmetry? If so, give the angle of rotation and all the turns of less than 360° that will rotate the design to a position in which it looks the same as originally pictured. Show your work.

