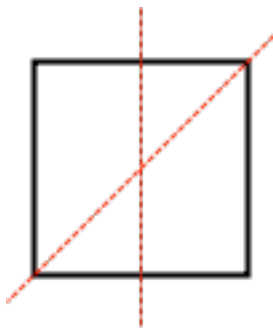


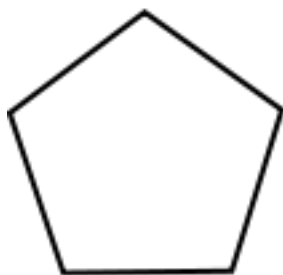
Symmetry of Stars and Polygons Exploration

Objective: Learn about reflectional and rotational symmetry of simple figures

1. Here are two of the mirror lines for a square. Find the other 2.



2. Find all the mirror lines for the regular pentagon (5-gon), the regular hexagon (6-gon) and the star below.



3. Draw the mirror lines for an equilateral triangle, and for a regular 8-gon (stop sign shape). How many mirror lines do you think there are in a regular 7-gon? In a 10-gon? Give a formula for the number of mirror lines in a regular polygon with n sides.

4. There are plenty of shapes that do not have reflectional symmetry. Draw some.

5. What are the order of rotation and the angle of rotation for the following shapes?



6. Draw a shape which has rotation symmetry but no reflection symmetry.

Hand in: This sheet with answers to all questions.