**Activity 1.6.2 Other Symmetry**

1. Graph a parallelogram with these vertices: *A*(6,4), *B*(-2, 4), *C*(-6,-4), and *D*(2, -4). How do you know that your polygon is a parallelogram?



Now rotate your parallelogram 90° about the origin. What observations can you draw about the new image?

Now rotate your parallelogram another 90° about the origin. What degree rotation is this from your original figure? What observations can you draw about this image?

Without performing the rotation, can you predict what a rotation of 270° will look like?

1. Other shapes exhibit rotational symmetry as well, such as a rectangle. How many degrees would a non-square rectangle have to be rotated to exhibit symmetry? Explain your reasoning.
2. Predict what kind of rotational symmetry a square will exhibit. Explain how you arrived at your prediction.
3. Other shapes such as kites also exhibit symmetry. What kind of symmetry does a kite have? Be specific.