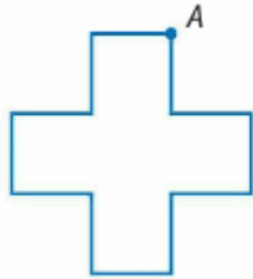
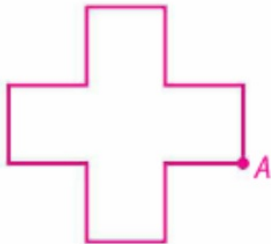


**Step 1**

Copy the outline of the first aid logo onto a piece of tracing paper. Label one vertex *A*.

**Step 2**

Place the tracing paper over the outline in Step 1. Put your pencil point at the center of the figure to hold the tracing paper in place. Turn the tracing paper clockwise from its original position until the two figures match. Draw and label the new figure in the space provided.

**Step 3**

Continue turning the tracing paper until the logo is back to its original position. Does the figure have rotational symmetry? Explain.

**Yes; Sample answer: the figure was turned less than  $360^\circ$**

**about its center and still looked like the original.**

Work with a partner. Determine whether the figure has rotational symmetry. Write *yes* or *no*.

1.



yes

2.



no

3.



yes



## Analyze and Reflect

4. **CCSS Reason Inductively** The degree measure of an angle through which the figure is rotated is called the **angle of rotation**. Find the first angle of rotation of the first aid logo by dividing  $360^\circ$  by the total number of times the figures matched.  $90^\circ$
5. List the other angles of rotation of the first aid logo by adding the measure of the first angle of rotation to the previous angle measure.  
Stop when you reach  $360^\circ$ .  $180^\circ, 270^\circ$
6. What is the angle of rotation of each figure in Exercises 1–3? Write *no* if there is no rotational symmetry.  
Exercise 1  $180^\circ$       Exercise 2 no      Exercise 3  $60^\circ$



## Create

7. **CCSS Model with Mathematics** Draw two figures, one that has rotational symmetry and one that does not. **See students' work.**



8. **Inquiry** HOW can you identify rotational symmetry?

**Sample answer: You can identify rotational symmetry by turning the figure less than  $360^\circ$  and determining if the figure looks the same as the original.**