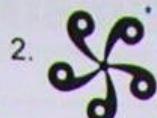


Practice: For each figure state the order and the angle of rotation.



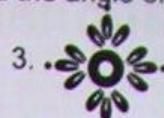
Order: 2

$$\text{Angle: } \frac{360}{2} = 180^\circ$$



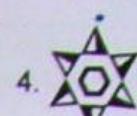
Order: 5

$$\text{Angle: } \frac{360}{5} = 72^\circ$$



Order: 4

$$\text{Angle: } \frac{360}{4} = 90^\circ$$



Order: 6

$$\text{Angle: } \frac{360}{6} = 60^\circ$$

Notes for Rotational Symmetry on a Coordinate Grid

The vertices of a polygon are listed. Graph and label each polygon and its image after a given rotation. Name the coordinates of the image.

1. Rotate figure STU about the origin  $90^\circ$  clockwise.

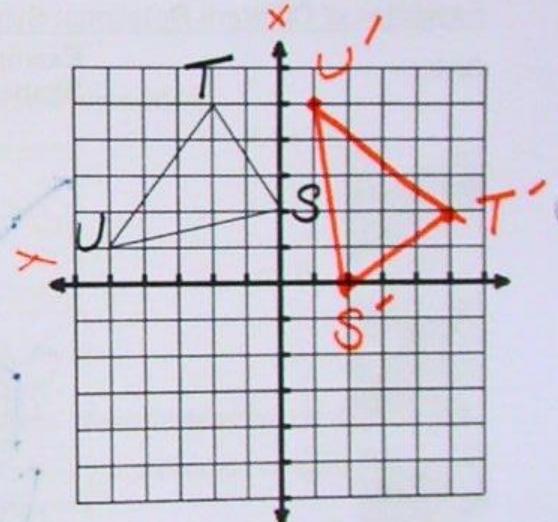
$$S(0, 2) \rightarrow S'(2, 0)$$

$$T(-2, 5) \rightarrow T'(5, 2)$$

$$U(-5, 1) \rightarrow U'(1, 5)$$

Write the general rule:

$$(x, y) \rightarrow (y, -x)$$



2. Rotate figure EFG about the origin  $180^\circ$ .

$$E(1, 4) \rightarrow E'(-1, -4)$$

$$F(3, -2) \rightarrow F'(-3, 2)$$

$$G(5, 4) \rightarrow G'(-5, -4)$$

Write the general rule:

$$(x, y) \rightarrow (-x, -y)$$

opposite

