

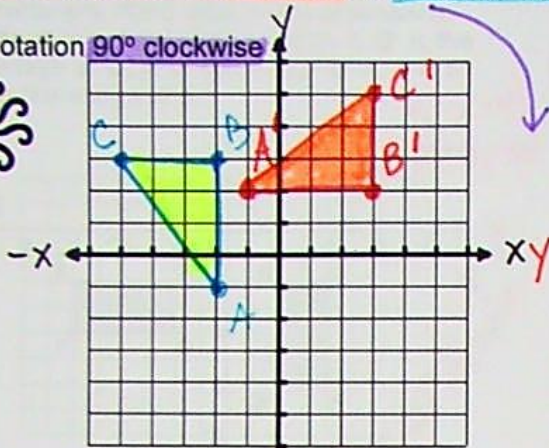
# UNIT 7: TRANSFORMATIONS

~ Unit 7, Page 19 ~

## More Rotational Symmetry

Plot and label the figure on each coordinate grid. Make the transformation that is indicated. State the transformed coordinates and the general rule.

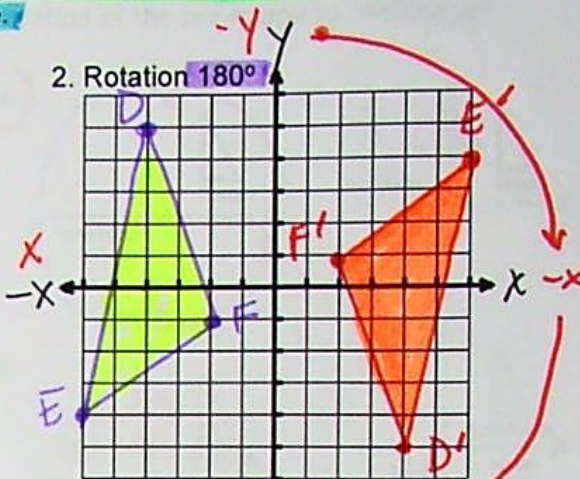
1. Rotation  $90^\circ$  clockwise



A (-2, -1)    A' (3, 2)  
 B (-2, 3)    B' (3, 5)  
 C (-5, 3)    C' (3, 2)

General Rule:  $(x, y) \rightarrow (y, -x)$

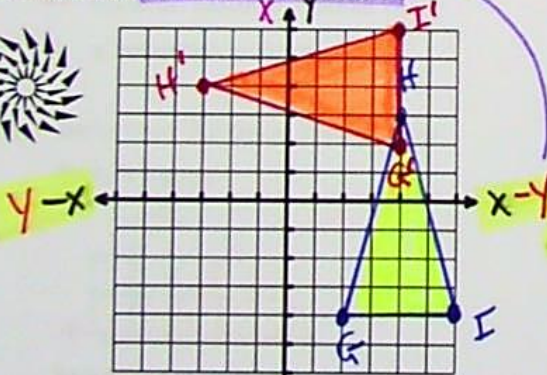
2. Rotation  $180^\circ$



D (-4, 5)    D' (4, -5)  
 E (-6, -4)    E' (6, 4)  
 F (-2, -1)    F' (2, 1)

General Rule:  $(x, y) \rightarrow (-x, -y)$

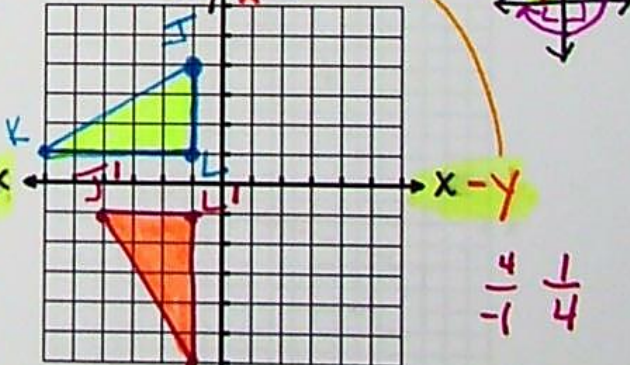
3. Rotation  $90^\circ$  counterclockwise



G (2, -4)    G' (4, 2)  
 H (4, 3)    H' (-3, 4)  
 I (6, -4)    I' (4, 6)

General Rule:  $(x, y) \rightarrow (-y, x)$

4. Rotation  $270^\circ$  clockwise



J (-1, 4)    J' (-4, -1)  
 K (-6, 1)    K' (-1, -6)  
 L (-1, 1)    L' (-1, -1)

General Rule:  $(x, y) \rightarrow (y, -x)$

Homework is continued on the next page.