

Name _____

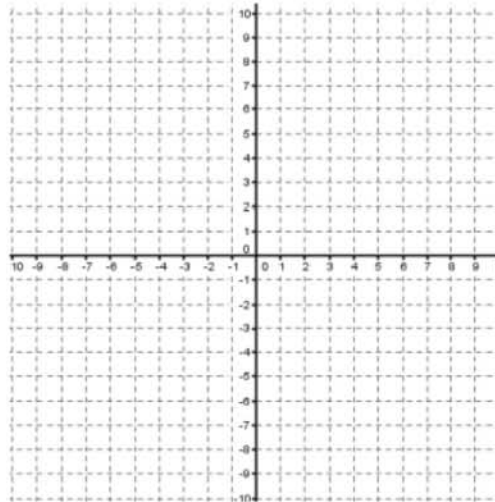
Compositions of Transformations Homework – Go for it!

Directions: Plot the composition of transformations on each graph and fill in the chart.

1. Plot A(0,0), B(8,1), C(5,5)

$r_{x\text{-axis}} \circ R_{0,180^\circ}$

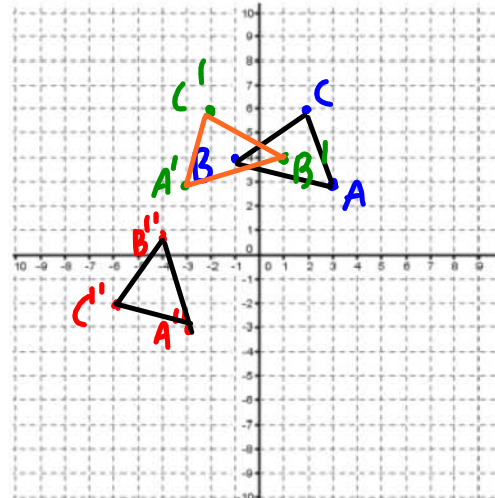
| Order your Transformations: | Coordinates: |
|-----------------------------|-------------------|
| 1) | A' B' C' |
| 2) | A'' B'' C'' |



2. Plot A(3,3), B(1,4), C(2,6)

② $R_{0,90^\circ} \circ r_{y\text{-axis}}$ ①

| Order your Transformations: | Coordinates: |
|-----------------------------|---|
| 1) $r_{y\text{-axis}}$ | A' (-3,3) B' (1,4) C' (-2,6) |
| 2) $R_{0,90^\circ}$ | A'' (-3,-3) B'' (-4,-1) C'' (-6,-2) |



3. Find the coordinates of $r_{y\text{-axis}} \circ r_{y=x}(A)$ if the coordinates of A are $(6, 1)$.

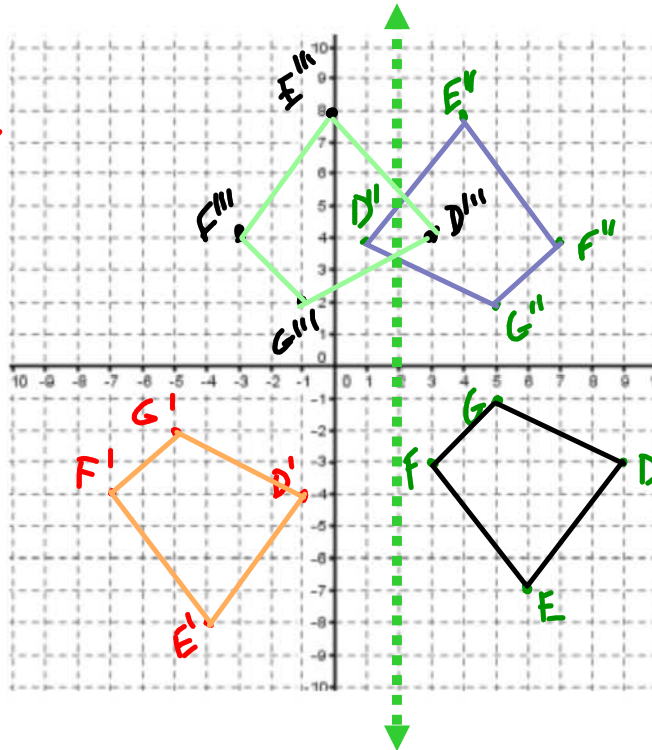
$A' (1, 6)$
 $A'' (-1, 6)$ A

4. Find the coordinates of the image of $(2, 4)$ under the transformation $r_{y\text{-axis}} \circ T_{3, -5}$.

$A' (5, -1)$
 $A'' (-5, -1)$

5. Plot $D(9, -3), E(6, -7), F(5, -3), G(5, -1)$
 $r_{x=2} \circ R_{0, 180} \circ T_{-10, -1}$

| Order your Transformations: | Coordinates: |
|-----------------------------|--|
| 1) $T_{(-10, -1)}$ | $D' (-1, -4)$ ✓ $E' (-4, -8)$ ✓ $F' (-7, -4)$ $G' (-5, -2)$ |
| 2) $R_{0, 180}$ | $D'' (1, 4)$ $E'' (4, 8)$ $F'' (7, 4)$ $G'' (5, 2)$ |
| 3) $r_{x=2}$ | D''' E''' F''' G''' |



ISOMETRY