Composition of Transformations

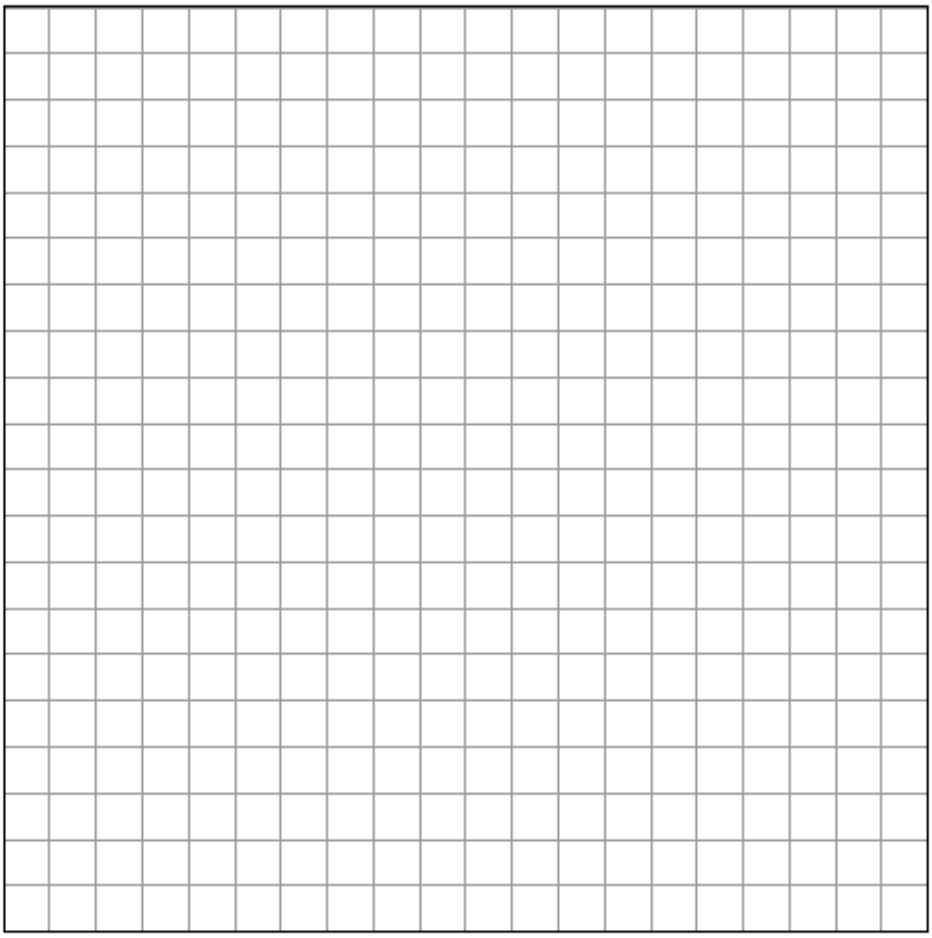
1.

a. Graph $\triangle ABC$, with coordinates $A(2, 2)$, $B(5, 1)$, $C(6, 4)$.

b. Graph $\triangle A'B'C'$, the image of $\triangle ABC$ under the transformation $R_{O,90°}$.

c. Graph $\triangle A''B''C''$, the image of $\triangle A'B'C'$ under the transformation R_O.

d. What single transformation is the *composite* of the transformations in parts *b* and *c*?



2.

a. Graph $\overline{AB}$, with coordinates $A(-1, 2)$ and $B(-2, 0)$.

b. Graph $\overline{A'B'}$, the image of $\overline{AB}$ under the transformation $r_{y\text{-axis}} \circ T_{0,-3}$.

c. Graph $\overline{A''B''}$, the image of $\overline{AB}$ under the transformation $T_{0,-3} \circ r_{y\text{-axis}}$.

d. What is the relationship between the composites in parts *b* and *c* ?